

# MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION

YARMOUTH & DENNIS CAPE COD RAIL TRAIL EXTENSION			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	CM/TAP/TI-002S(758)X	1	185
PROJECT FILE NO. 604488			
TITLE & INDEX SHEET			

PLAN AND PROFILE OF  
CAPE COD RAIL TRAIL EXTENSION - PHASE 1  
(BRIDGE NO. Y-01-009(BMH) & NO. D-07-015(BMG))

IN THE TOWNS OF  
YARMOUTH & DENNIS  
BARNSTABLE COUNTY

FEDERAL AID PROJECT NO. : CM/TAP/TI-002S(758)X

THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES DATED 1988, AS AMENDED; THE SUPPLEMENTAL SPECIFICATIONS DATED JUNE 15, 2012; THE INTERIM SUPPLEMENTAL SPECIFICATIONS DATED MAY 2, 2014; THE 2014 CONSTRUCTION STANDARD DETAILS; THE 1996 CONSTRUCTION AND TRAFFIC STANDARD DETAILS, (AS RELATED TO TRAFFIC STANDARD DETAILS ONLY); THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS WITH MASSACHUSETTS AMENDMENTS; THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS; THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING; AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, WILL GOVERN.

DESIGN DESIGNATION (CAPE COD RAIL TRAIL EXTENSION)

DESIGN SPEED 18 MPH  
FUNCTIONAL CLASSIFICATION MULTI-USE PATH

DESIGN DESIGNATION (STATION AVENUE)

DESIGN SPEED 35 MPH  
FUNCTIONAL CLASSIFICATION URBAN PRINCIPAL ARTERIAL

DESIGN DESIGNATION (DUPONT AVENUE)

DESIGN SPEED 25 MPH  
FUNCTIONAL CLASSIFICATION LOCAL ROAD

DESIGN DESIGNATION (NORTH MAIN STREET)

DESIGN SPEED 30 MPH  
FUNCTIONAL CLASSIFICATION URBAN MINOR ARTERIAL

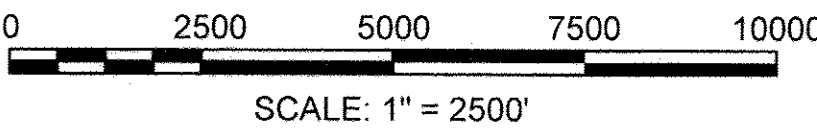
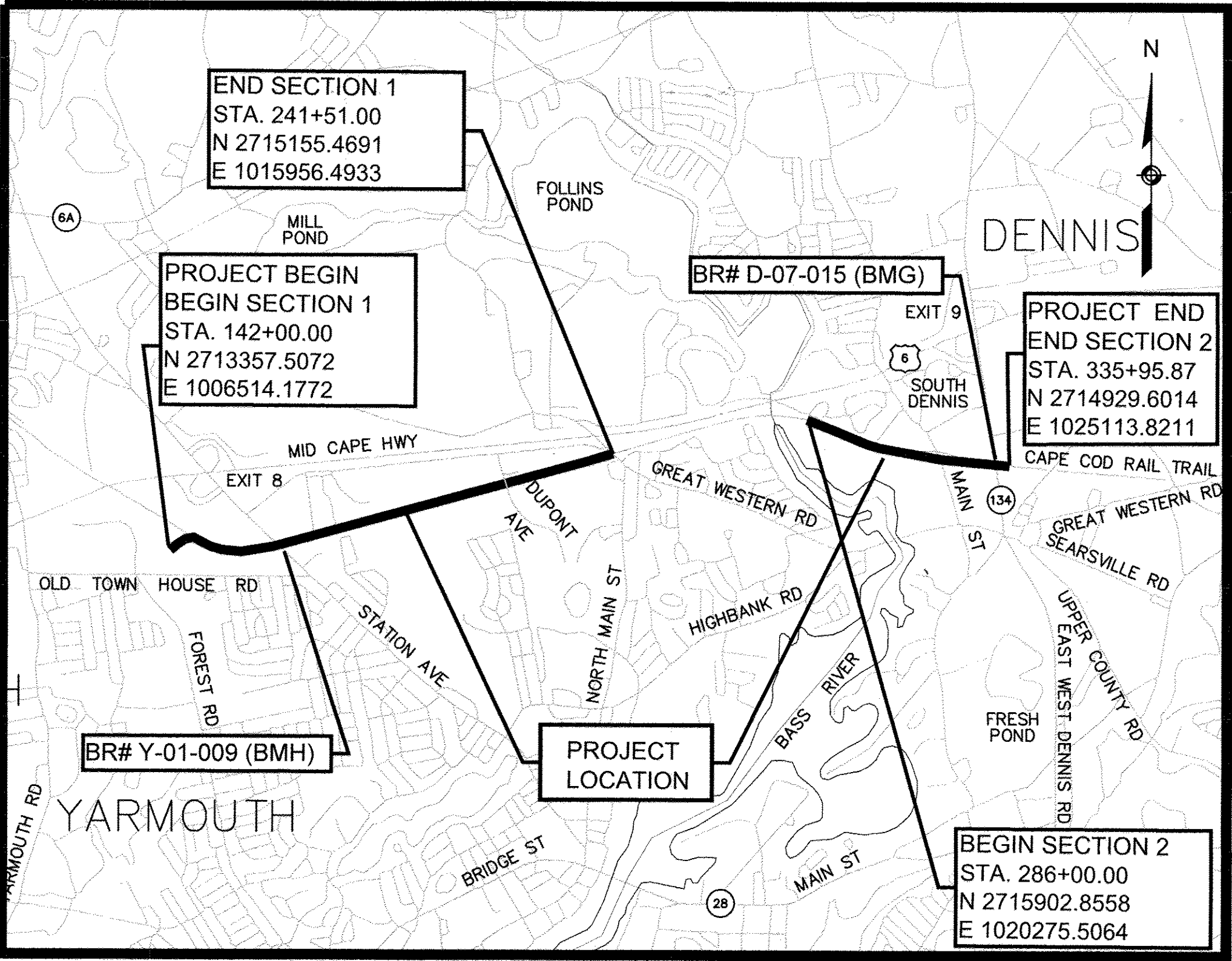
DESIGN DESIGNATION (MAIN STREET)

DESIGN SPEED 25 MPH  
FUNCTIONAL CLASSIFICATION URBAN MINOR ARTERIAL

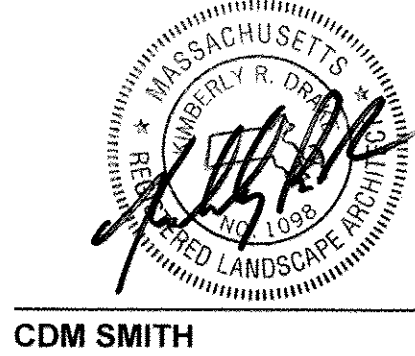
DESIGN DESIGNATION (EAST-WEST DENNIS ROAD - ROUTE 134)

DESIGN SPEED 35 MPH  
FUNCTIONAL CLASSIFICATION URBAN PRINCIPAL ARTERIAL

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182-185	



LENGTH OF PROJECT = 14,946.87 FEET = 2.831 MILES



10/16/14  
DATE



10/16/2014  
DATE



CHIEF ENGINEER

APPROVED

DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

10/22/14  
DATE

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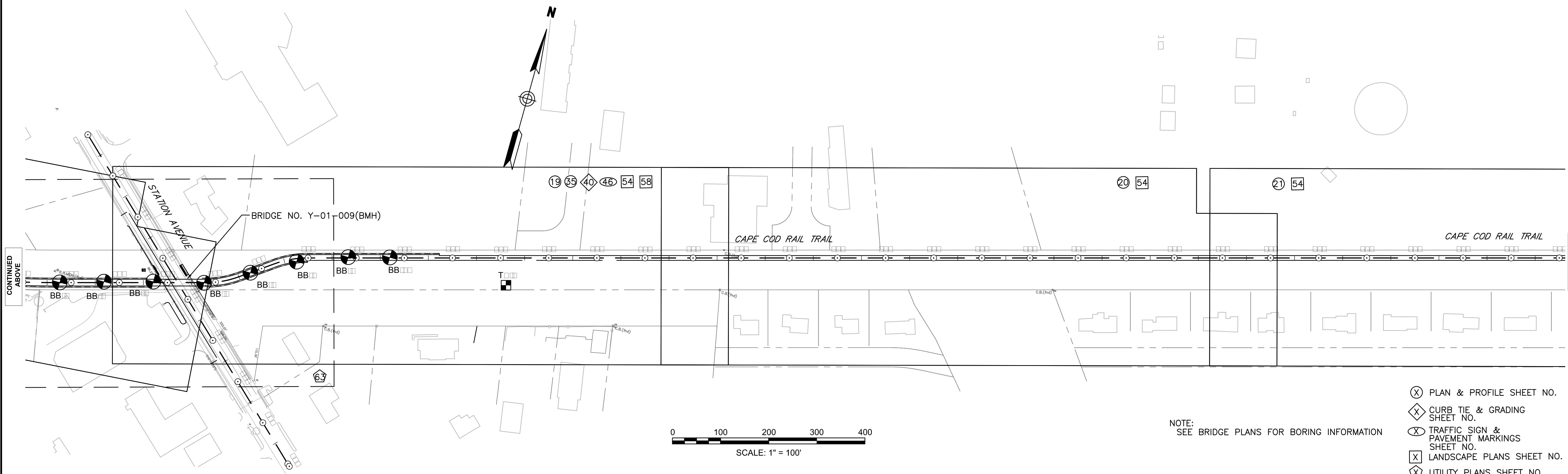
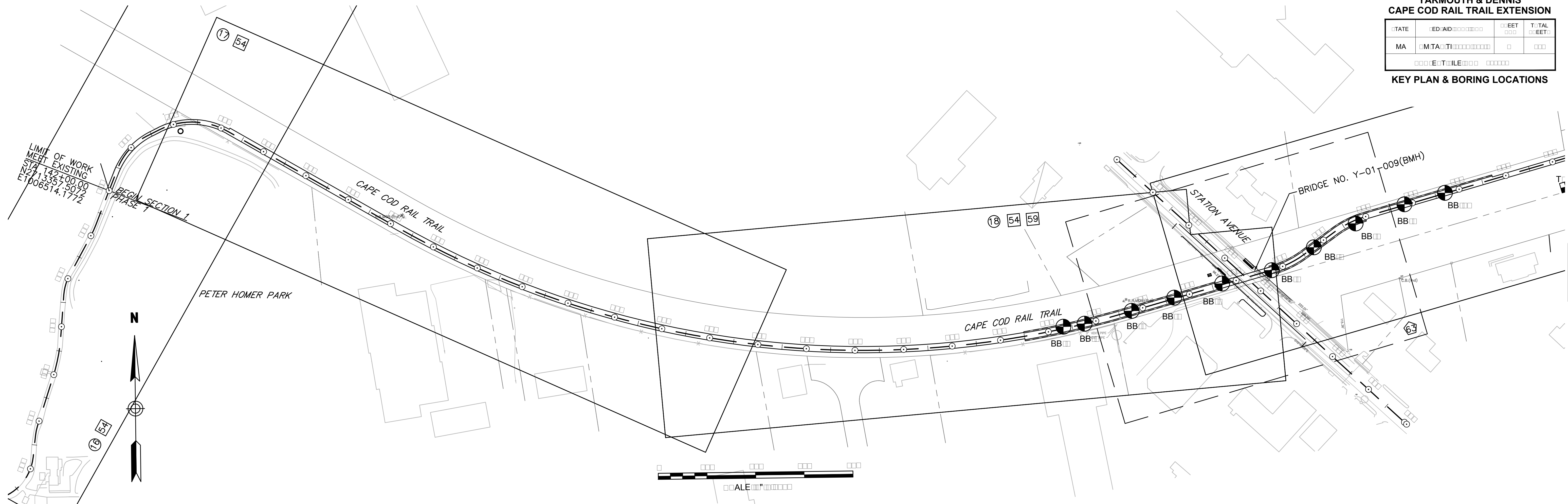
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YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	ED AID	SHEET	TOTAL
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KEY PLAN & BORING LOCATIONS



NOTE:  
SEE BRIDGE PLANS FOR BORING INFORMATION

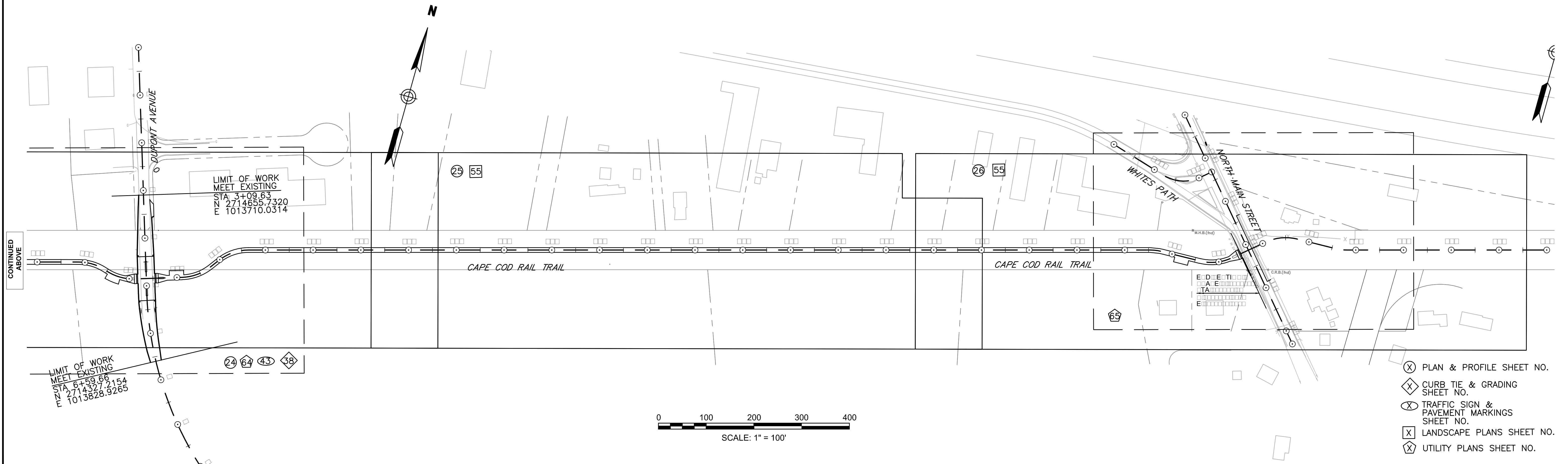
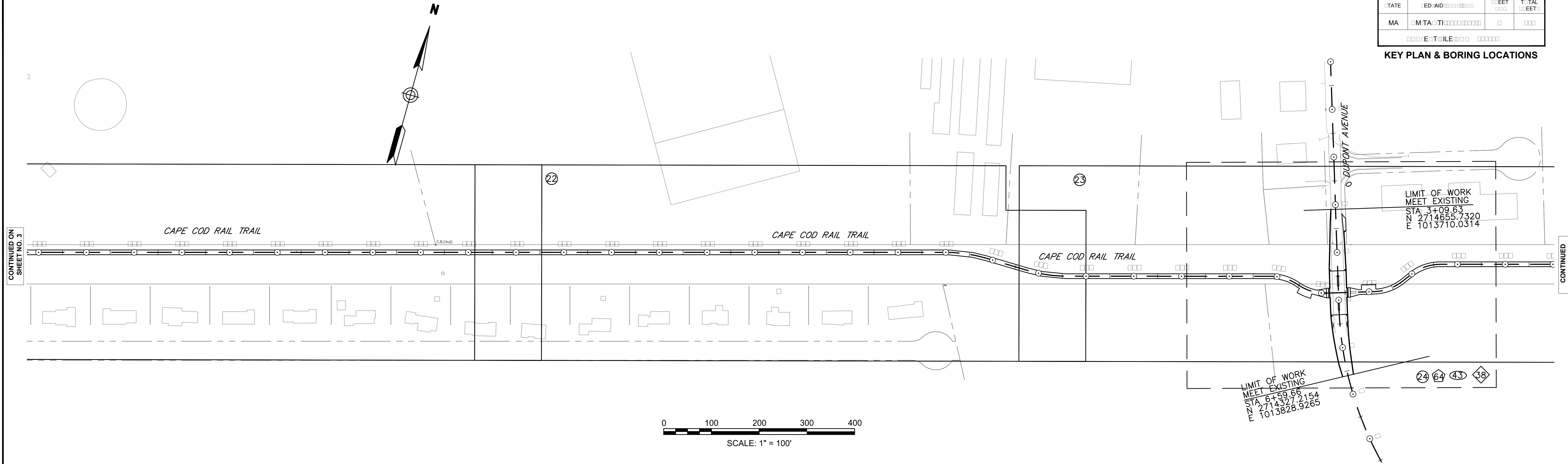
- ⊗ PLAN & PROFILE SHEET NO.
- ⊗ CURB TIE & GRADING SHEET NO.
- ⊗ TRAFFIC SIGN & PAVEMENT MARKINGS SHEET NO.
- ⊗ LANDSCAPE PLANS SHEET NO.
- ⊗ UTILITY PLANS SHEET NO.



YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	ED AID	SHEET	TOTAL
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KEY PLAN & BORING LOCATIONS



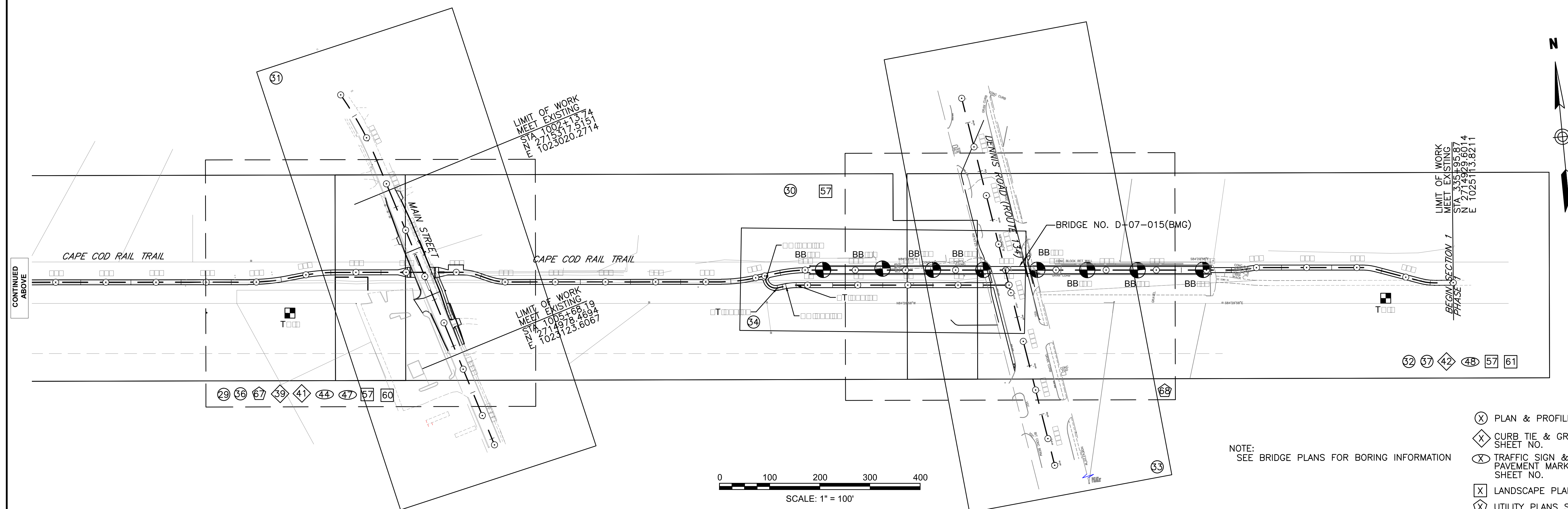
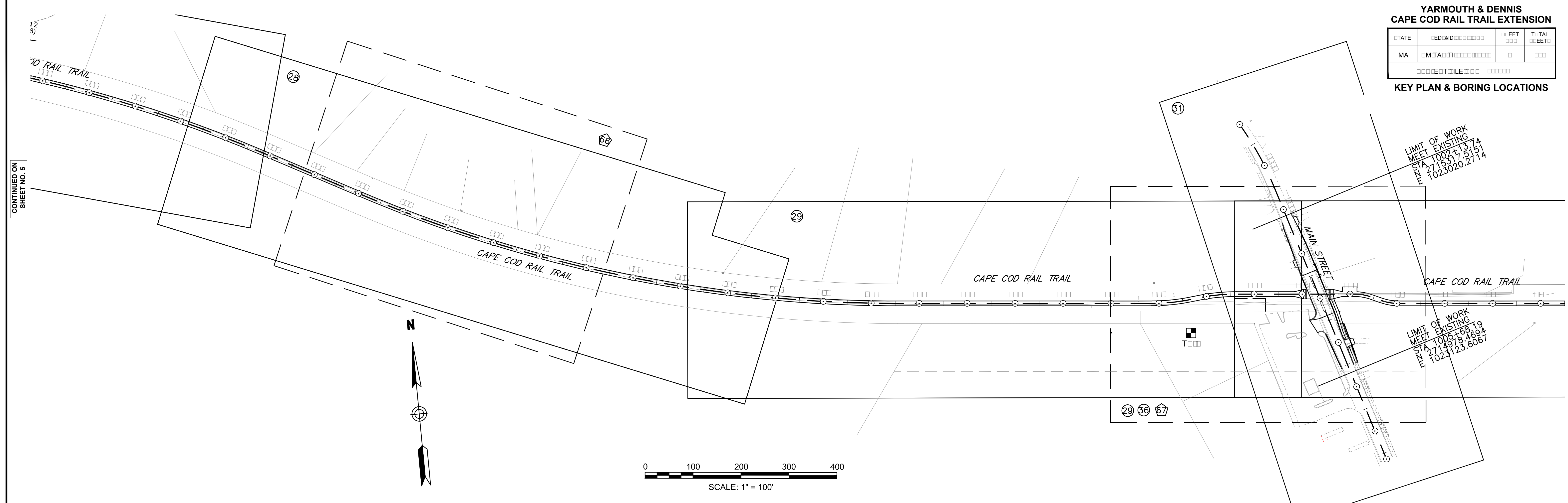
- (X) PLAN & PROFILE SHEET NO.
- (X) CURB TIE & GRADING SHEET NO.
- (X) TRAFFIC SIGN & PAVEMENT MARKINGS SHEET NO.
- (X) LANDSCAPE PLANS SHEET NO.
- (X) UTILITY PLANS SHEET NO.





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## KEY PLAN & BORING LOCATIONS





YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	CM/TAP/TL-002S(758)X	7	185

PROJECT FILE NO. 604488

TYPICAL SECTIONS

PAVEMENT NOTES

PROPOSED FULL DEPTH SHARED USE PATH (SUP) PAVEMENT  
STA. 144+50-166+70, 167+69-217+45, 219+65-241+50, 286+00-315+13, 315+52-326+54, 327+60-335+96  
STA 20+08± TO STA 24+46± (RTE 134 SPUR)

SURFACE: 1.5" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5) OVER

BASE: 2.5" SUPERPAVE INTERMEDIATE COURSE 19.0 (SIC-19.0)

SUBBASE: 4" GRAVEL BORROW, TYPE b

PROPOSED FULL DEPTH SHARED USE PATH (SUP) PAVEMENT  
STA. 142+00-144+50, 217+45-218+10, 218+55-219+65

SURFACE: 1.5" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5) OVER

BASE: 2.5" SUPERPAVE INTERMEDIATE COURSE 19.0 (SIC-19.0)

SUBBASE: 12" GRAVEL BORROW, TYPE b

PROPOSED FULL DEPTH PAVEMENT

SURFACE: 1.5" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5) OVER

2.5" SUPERPAVE INTERMEDIATE COURSE 19.0 (SIC-19.0)

BASE: 4.0" SUPERPAVE BASE COURSE 37.5 (SBC-37.5)

SUBBASE: 4" DENSE GRADED CRUSHED STONE OVER  
8" GRAVEL BORROW, TYPE b

PROPOSED FULL DEPTH PAVEMENT (LESS THAN 4.0' WIDE)

SURFACE: 1.5" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5) OVER  
2.5" SUPERPAVE INTERMEDIATE COURSE 19.0 (SIC-19.0)

BASE: 8" HIGH EARLY STRENGTH CEMENT  
CONCRETE BASE COURSE

SUBBASE: 8" GRAVEL BORROW, TYPE b

PROPOSED FULL DEPTH PARKING AREA

SURFACE: 1.5" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5) OVER  
2.5" SUPERPAVE INTERMEDIATE COURSE 19.0 (SIC-19.0)

SUBBASE: 12" GRAVEL BORROW, TYPE b

PROPOSED PAVEMENT MILLING AND OVERLAY

SURFACE: 1.5" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5) OVER  
1.5" MAXIMUM PAVEMENT MILLING

LEVELING COURSE: VARIABLE DEPTH (1" MIN) SUPERPAVE LEVELING COURSE 9.5 (SIC-9.5)  
ASPHALT EMULSION FOR TACK COAT AT 0.07 GAL/SY

PROPOSED HOT MIX ASPHALT DRIVEWAY

SURFACE: 1.5" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5) OVER  
2.0" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5)

FOUNDATION: 8" GRAVEL BORROW, TYPE b

PROPOSED HOT MIX ASPHALT WALK

SURFACE: 1.0" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5) OVER  
1.5" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5)

FOUNDATION: 8" GRAVEL BORROW, TYPE b

PROPOSED CEMENT CONCRETE WHEELCHAIR RAMP/ISLAND

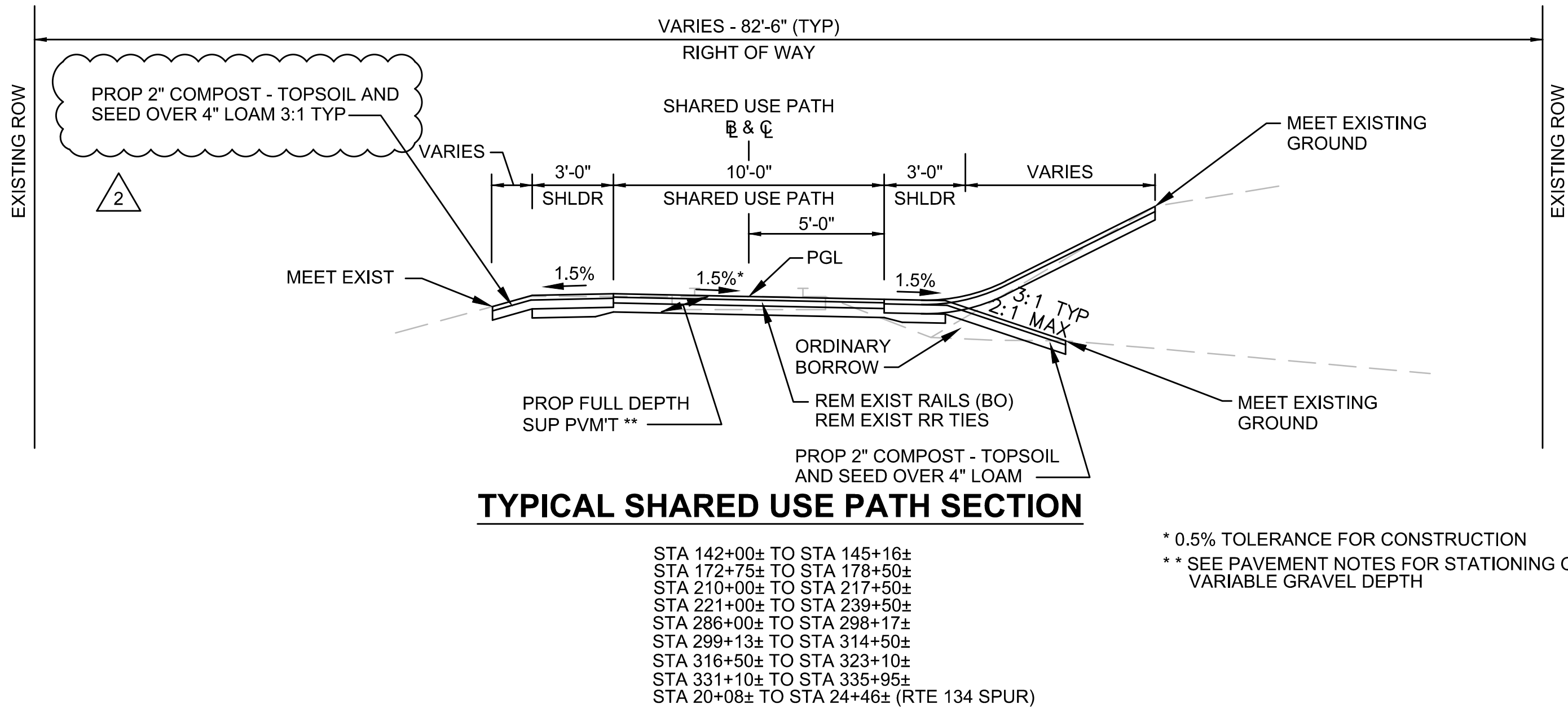
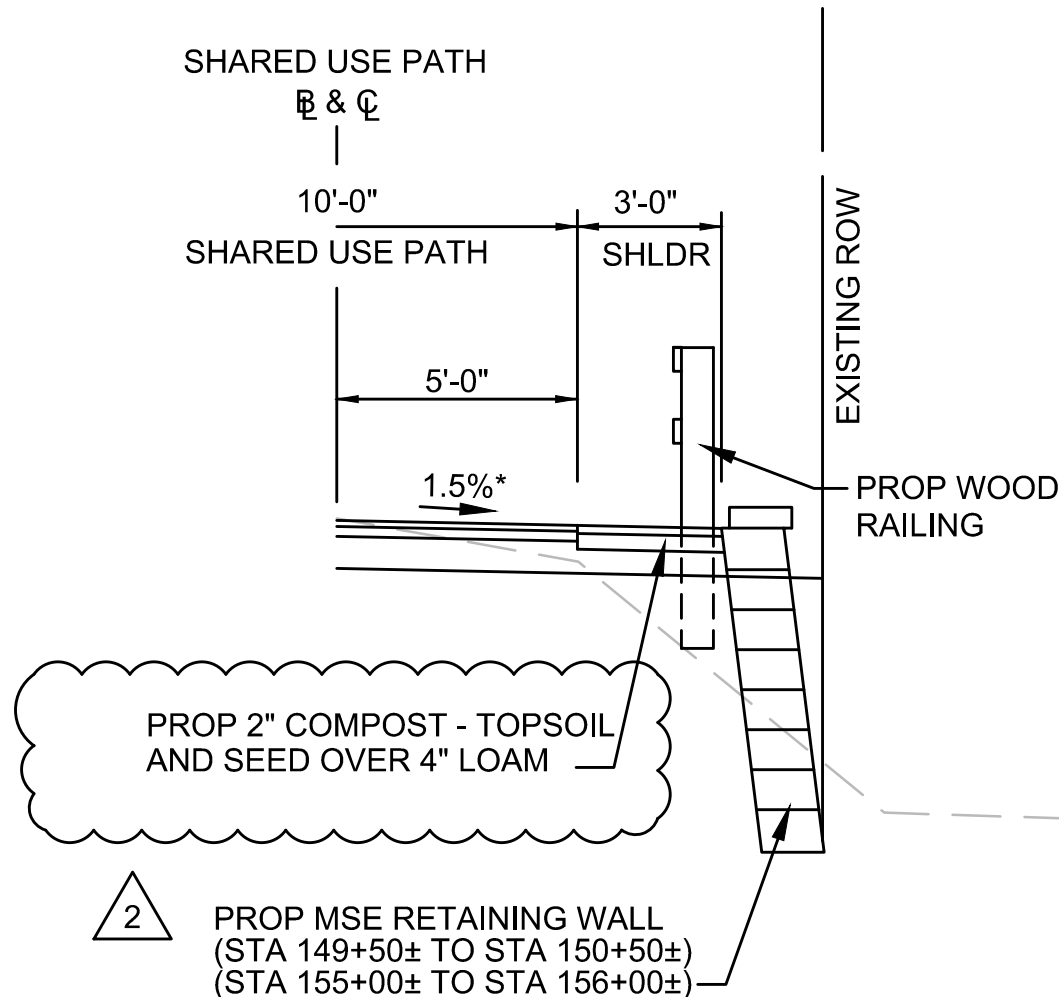
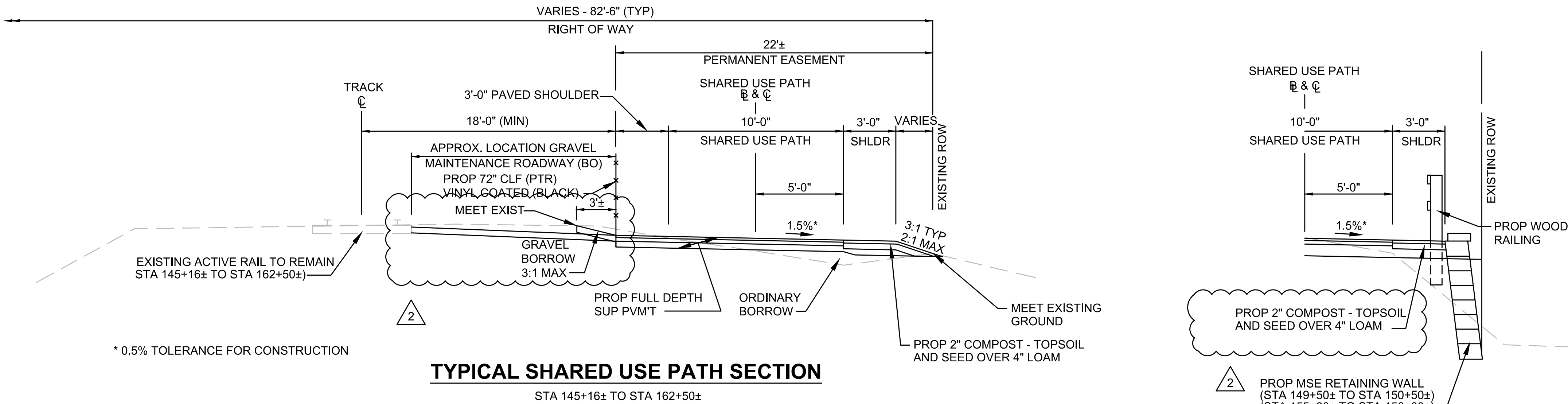
SURFACE: 4" CEMENT CONCRETE  
AIR ENTRAINED 4000 PSI, 3/4", 610

FOUNDATION: 8" GRAVEL BORROW, TYPE b

PROPOSED TEXTURIZED DECORATIVE PAVEMENT (IMPRINT)

SURFACE: 0.75" HOT APPLIED RESIN MATERIAL  
2.0" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5)

FOUNDATION: 8" GRAVEL BORROW, TYPE b



NO.	REVISION DESCRIPTION	DATE
2	TYPICAL SECTION REVISION	6/23/2015
REVISIONS		

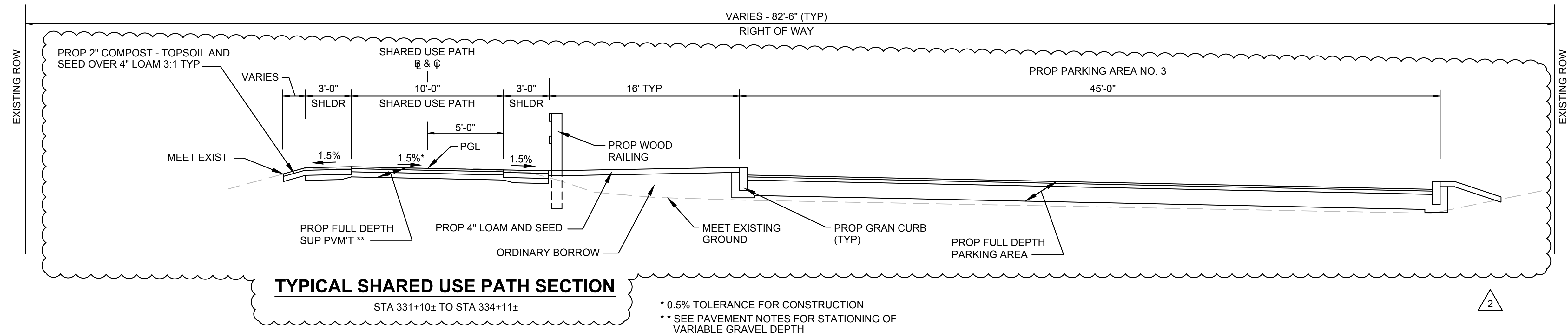
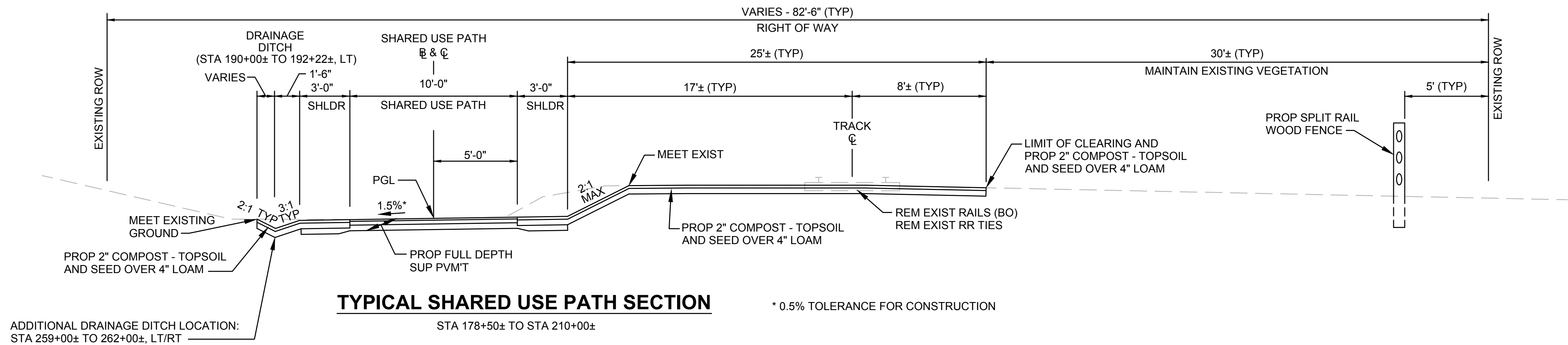
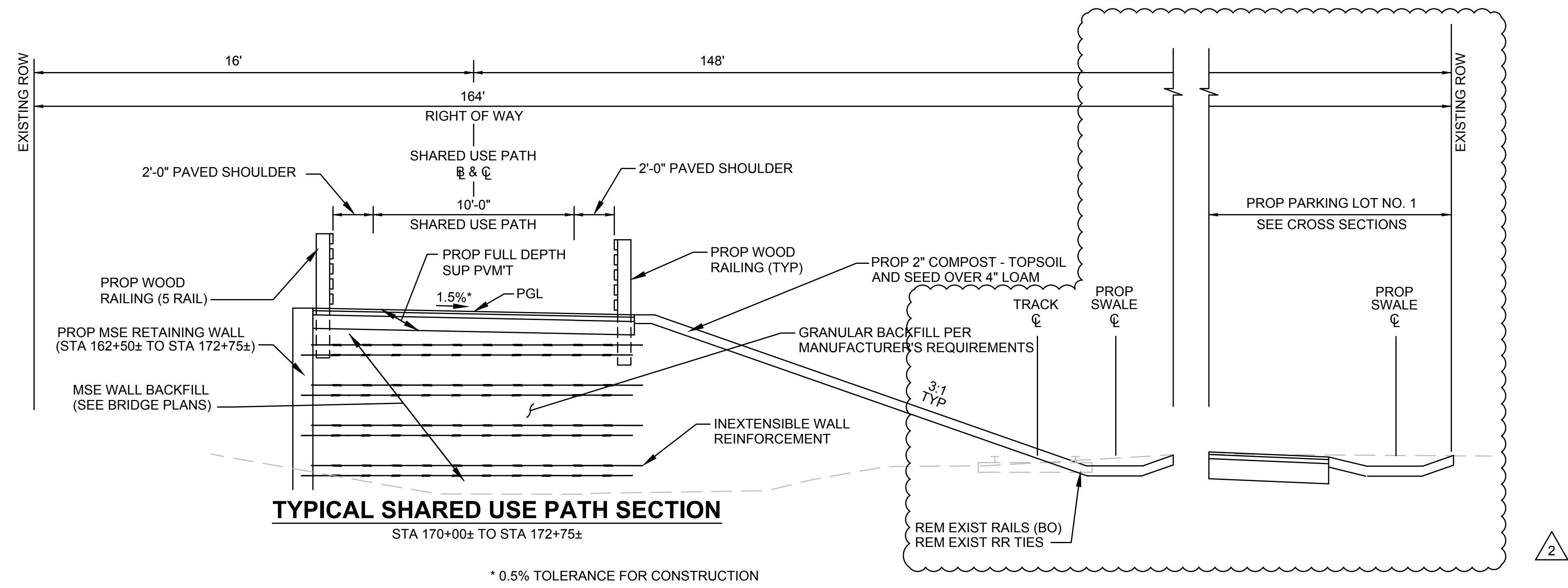




YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	CM/TAP/TI-002S(758)X	9	185
PROJECT FILE NO. 604488			

TYPICAL SECTIONS



NO.	REVISION DESCRIPTION	DATE
2	TYPICAL SECTION REVISION	6/23/2015
REVISIONS		

AEDAILTILETTEBALEIDE DATA								
MBE	TATI	T	EA	E DATA	LI DATA	EDI	T	EA
L					S38° 22' 30"E			
				R=275.00' Δ:37°56'16" L				
L					S76° 18' 46"E			
				R=200.00' Δ:25°02'48" L				
L					N78° 38' 26"E			
				R=100.00' Δ:71°47'10" L				
L					N6° 51' 16"E			
				R=100.00' Δ:11°28'22" L				
L					N18° 19' 38"E			
				R=350.00' Δ:13°26'53" L				
L					N4° 52' 45"E			
				R=100.00' Δ:24°11'28" L				
L					N29° 04' 13"E			
				R=200.00' Δ:7°11'23" L				
L					N21° 52' 50"E			
				R=125.00' Δ:42°07'57" L				
L					N64° 00' 47"E			
				R=150.00' Δ:56°12'35" L				
L					S59° 46' 38"E			
				R=1936.00' Δ:45°49'56" L				
L					N74° 23' 26"E			
				R=200.00' Δ:20°06'35" L				
L					N54° 16' 51"E			
				R=200.00' Δ:20°06'38" L				
L					N74° 23' 29"E			
				R=300.00' Δ:16°27'00" L				
L					S89° 09' 32"E			
				R=300.00' Δ:16°26'18" L				
L					N74° 24' 11"E			
				R=100.00' Δ:34°38'50" L				
				R=100.00' Δ:36°32'10" L				
L					N72° 30' 51"E			
				R=100.00' Δ:36°32'10" L				
L					N35° 58' 40"E			
				R=100.00' Δ:38°24'48" L				

AEDAILTILETTEBALEIDE DATA								
MBE	TATI	T	EA	E DATA	LI DATA	EDI	T	EA
L					N74° 23' 29"E			
				R=100.00' Δ:14°02'10" L				
L					N88° 25' 39"E			
				R=100.00' Δ:39°08'18" L				
L					N49° 17' 21"E			
				R=100.00' Δ:39°08'18" L				
L					N88° 25' 39"E			
				R=100.00' Δ:14°02'10" L				
L					N74° 23' 29"E			
				R=1910.00' Δ:16°32'06" L				
L					S89° 04' 25"E			
				R=2865.00' Δ:27°29'50" L				
L					S61° 34' 35"E			
				R=2865.00' Δ:22°56'10" L				
L					S84° 30' 45"E			
				R=400.00' Δ:12°38'19" L				
				R=400.00' Δ:12°38'19" L				
L					S84° 30' 45"E			
				R=100.00' Δ:19°14'15" L				
L					S65° 16' 30"E			
				R=100.00' Δ:19°14'15" L				
L					S84° 30' 45"E			
				R=300.00' Δ:11°49'14" L				
L					N83° 40' 01"E			
				R=300.00' Δ:11°51'42" L				
L					S84° 28' 18"E			
				R=100.00' Δ:10°12'57" L				
L					N85° 18' 45"E			
				R=100.00' Δ:10°12'57" L				
L					S84° 28' 18"E			
				R=100.00' Δ:14°40'37" L				
L					S69° 47' 41"E			
				R=100.00' Δ:15°11'59" L				
L					S84° 59' 40"E			

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TEBABLEIDE DATA



YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	EDWARD	SHEET	TOTAL
MA	DMTAT	00	000
CONSTRUCTION BASELINE DATA			

CONSTRUCTION BASELINE DATA

TATIAEETTTTBASELINE DATA								
MBE	TATTAT	TTT	EAT	EE DATA	LINE DATA	EDITTAT	TTT	EAT
L					S46° 54' 39"E			

DTATIAEETTTTBASELINE DATA								
MBE	TATTAT	TTT	EAT	EE DATA	LINE DATA	EDITTAT	TTT	EAT
L					S17° 33' 32"E			
				R=720.00' Δ=37°12'48" L				

TTTMAITTEETTTTBASELINE DATA								
MBE	TATTAT	TTT	EAT	EE DATA	LINE DATA	EDITTAT	TTT	EAT
L					S40° 43' 34"E			

ITTEATTTTBASELINE DATA								
MBE	TATTAT	TTT	EAT	EE DATA	LINE DATA	EDITTAT	TTT	EAT
L					S73° 41' 07"E			
				R=80.00' Δ=57°01'31" L				
L					N49° 17' 23"E			

MAITTEETTTTBASELINE DATA								
MBE	TATTAT	TTT	EAT	EE DATA	LINE DATA	EDITTAT	TTT	EAT
L					S28° 13' 49"E			
				R=600.00' Δ=11°16'47" L				
L					S16° 57' 01"E			

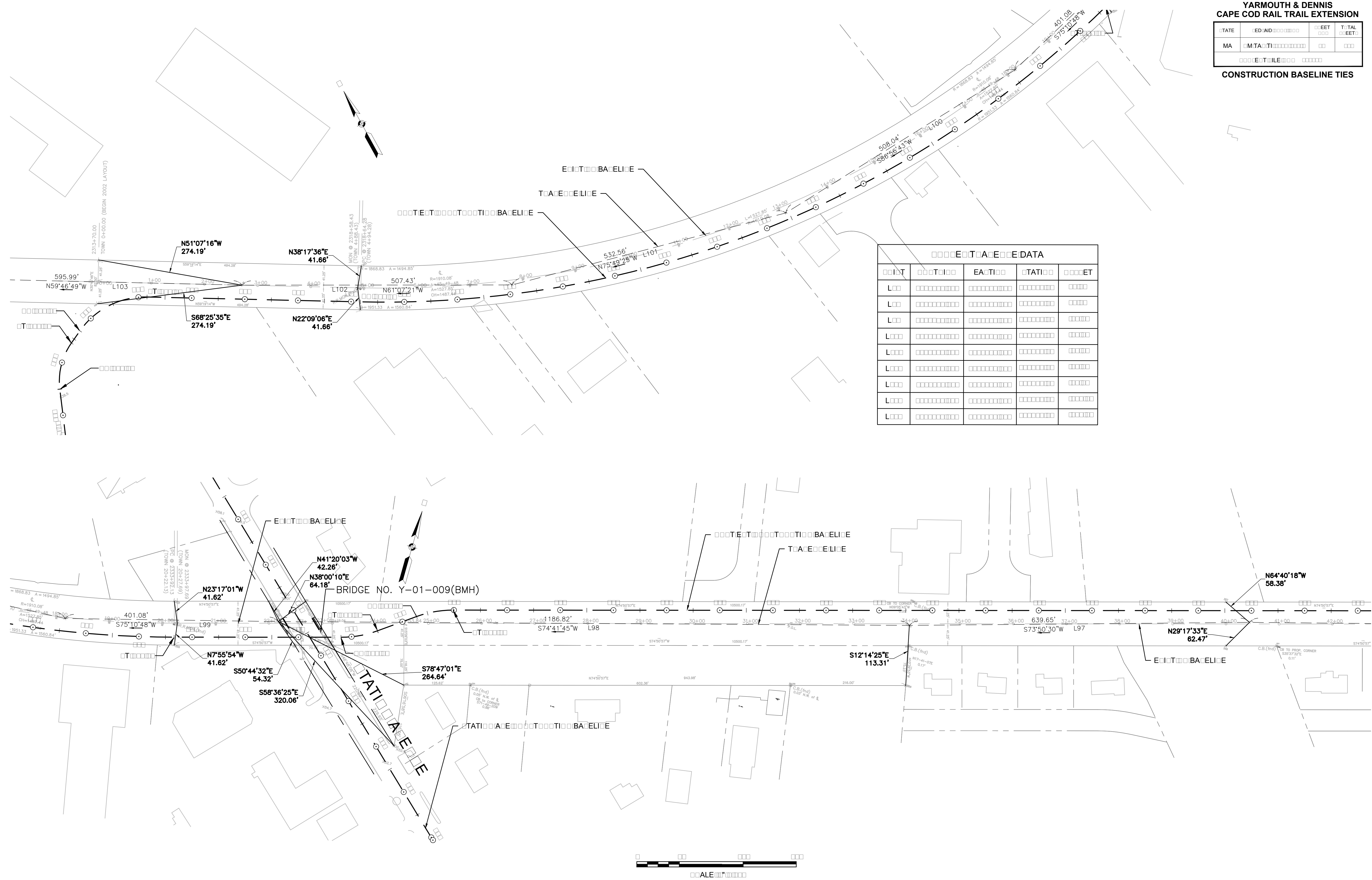
TTTTTTBASELINE DATA								
MBE	TATTAT	TTT	EAT	EE DATA	LINE DATA	EDITTAT	TTT	EAT
L					S6° 19' 59"E			
				R=20.00' Δ=89°48'46" L				
L					N83° 51' 14"E			
				R=100.00' Δ=11°40'28" L				
L					S84° 28' 18"E			

TETTTTBASELINE DATA								
MBE	TATTAT	TTT	EAT	EE DATA	LINE DATA	EDITTAT	TTT	EAT
L					S8° 41' 04"E			

YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	ED AID	EET	TOTAL
MA	MTA		

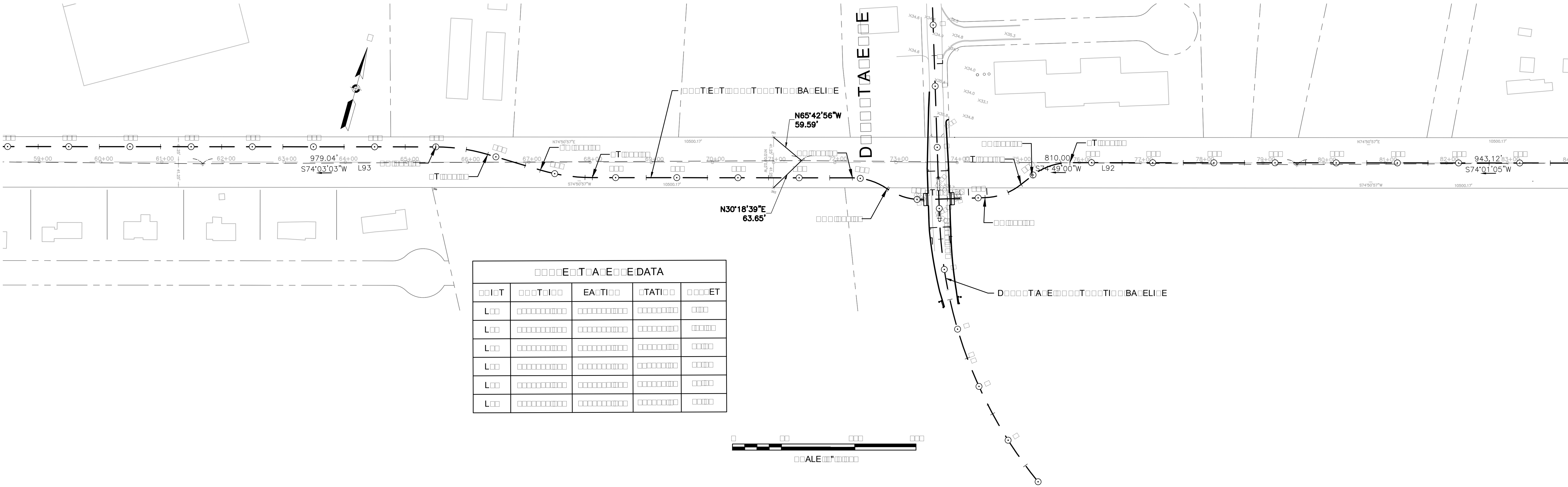
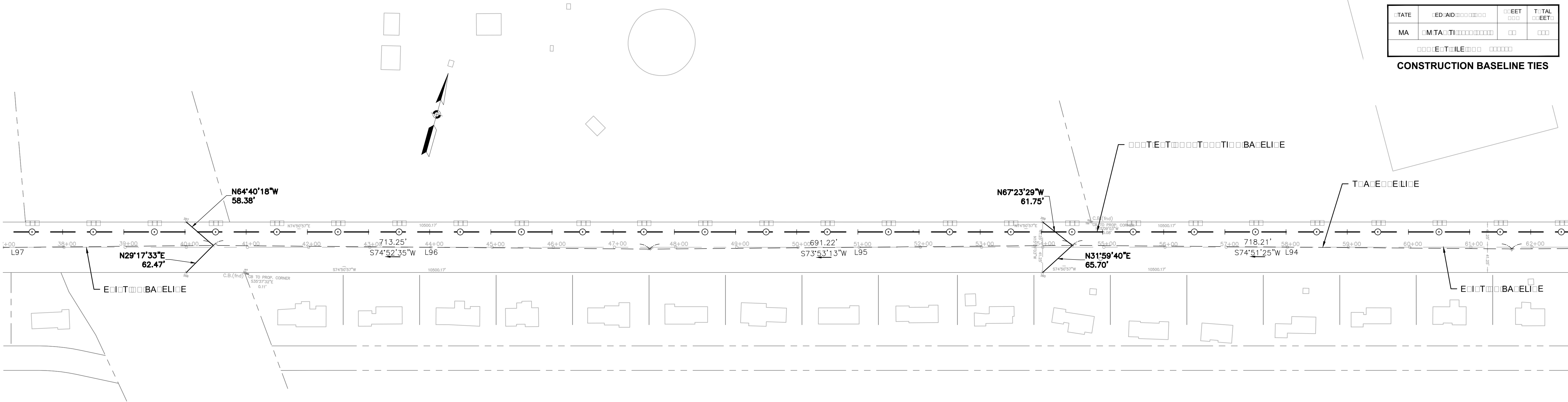
CONSTRUCTION BASELINE TIES



YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	ED AID	FEET	TOTAL
MA	MTA		

CONSTRUCTION BASELINE TIES

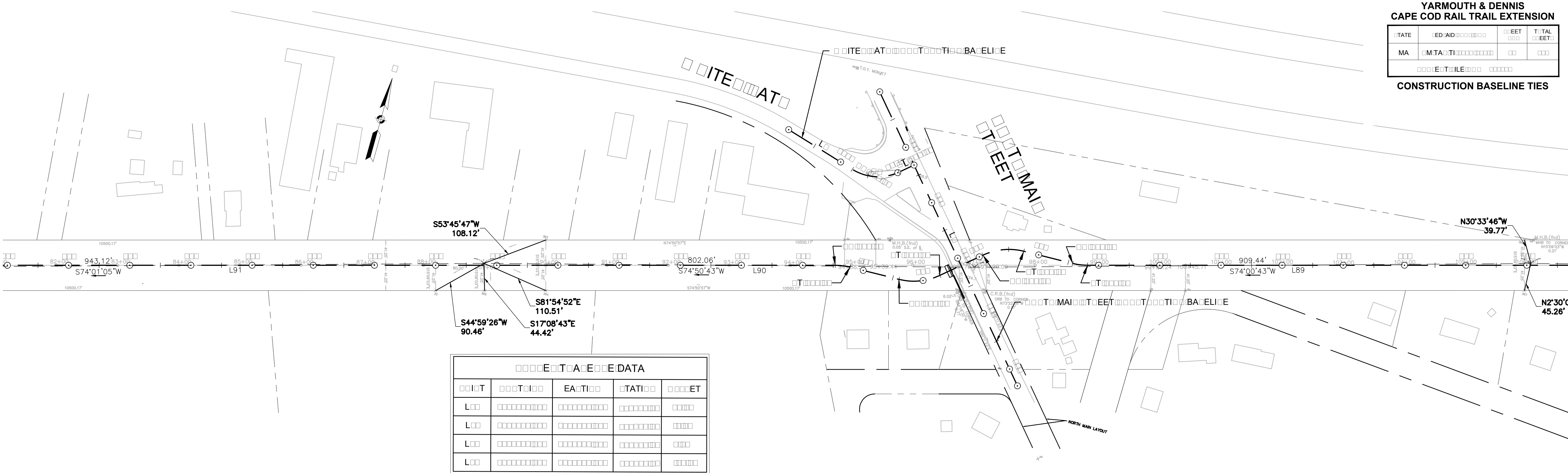


CONSTRUCTION BASELINE TIES DATA				
POINT	POINT	EA/TI	TATI	FEET
L1				
L2				
L3				
L4				
L5				
L6				



YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	ED AID	FEET	TOTAL
MA	MTA		
CONSTRUCTION BASELINE TIES			

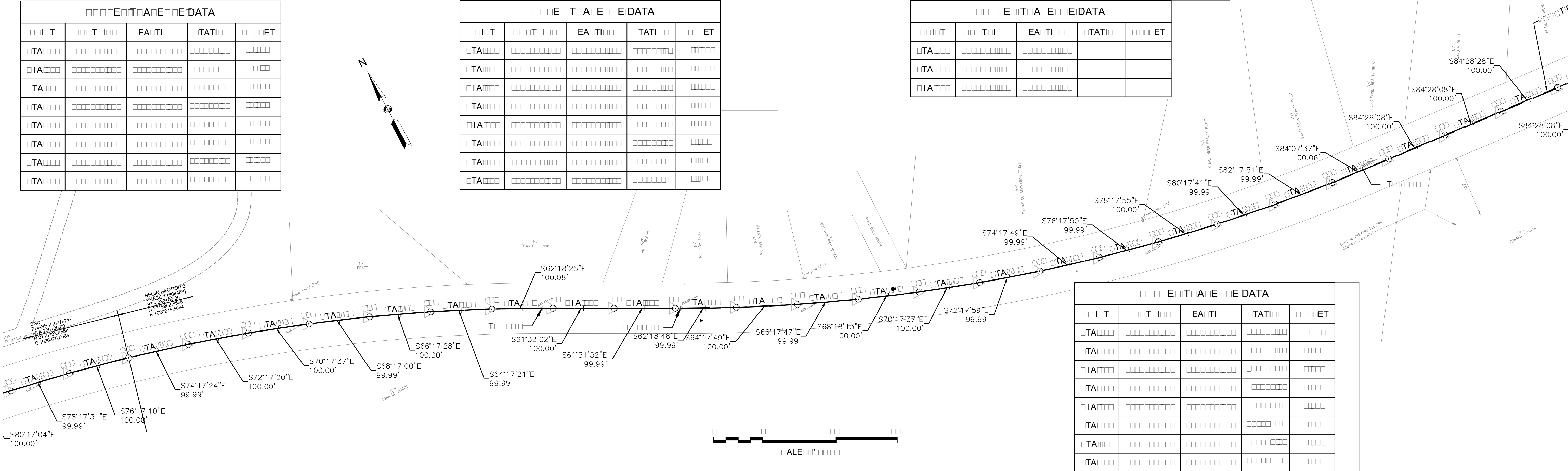


CONSTRUCTION BASELINE TIES				
POINT	TO POINT	BEARING	DISTANCE	REMARKS
L91	L92	S74°01'05" E	10.00	10.00
L92	L93	S74°00'43" E	10.00	10.00
L93	L94	S74°00'43" E	10.00	10.00
L94	L95	S74°00'43" E	10.00	10.00

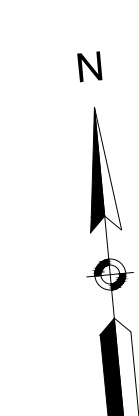
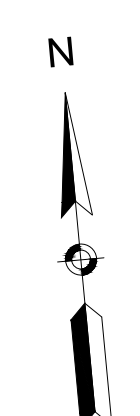
CONSTRUCTION BASELINE TIES				
POINT	TO POINT	BEARING	DISTANCE	REMARKS
TA1	TA2	S74°01'05" E	10.00	10.00
TA2	TA3	S74°00'43" E	10.00	10.00
TA3	TA4	S74°00'43" E	10.00	10.00
TA4	TA5	S74°00'43" E	10.00	10.00
TA5	TA6	S74°00'43" E	10.00	10.00
TA6	TA7	S74°00'43" E	10.00	10.00
TA7	TA8	S74°00'43" E	10.00	10.00
TA8	TA9	S74°00'43" E	10.00	10.00

CONSTRUCTION BASELINE TIES				
POINT	TO POINT	BEARING	DISTANCE	REMARKS
TA1	TA2	S74°01'05" E	10.00	10.00
TA2	TA3	S74°00'43" E	10.00	10.00
TA3	TA4	S74°00'43" E	10.00	10.00
TA4	TA5	S74°00'43" E	10.00	10.00
TA5	TA6	S74°00'43" E	10.00	10.00
TA6	TA7	S74°00'43" E	10.00	10.00
TA7	TA8	S74°00'43" E	10.00	10.00
TA8	TA9	S74°00'43" E	10.00	10.00

CONSTRUCTION BASELINE TIES				
POINT	TO POINT	BEARING	DISTANCE	REMARKS
TA1	TA2	S74°01'05\"/>E	10.00	
TA2	TA3	S74°00'43\"/>E	10.00	
TA3	TA4	S74°00'43\"/>E	10.00	
TA4	TA5	S74°00'43\"/>E	10.00	



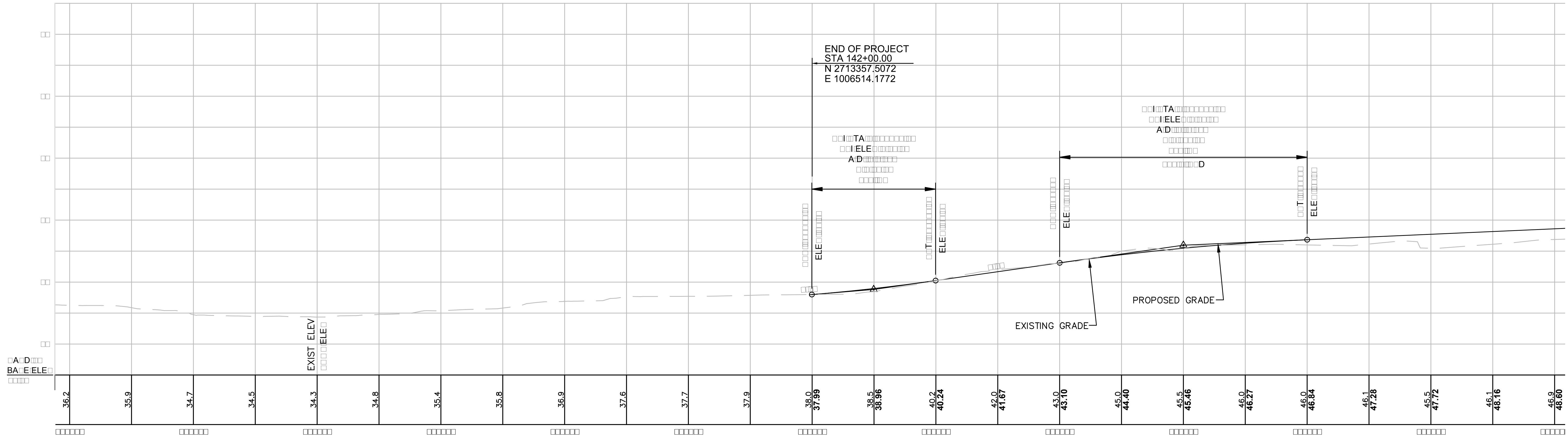
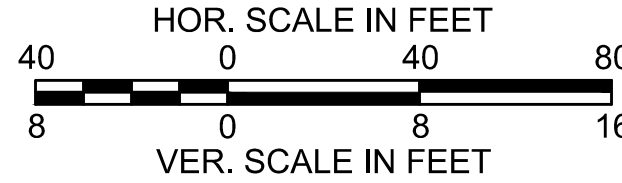
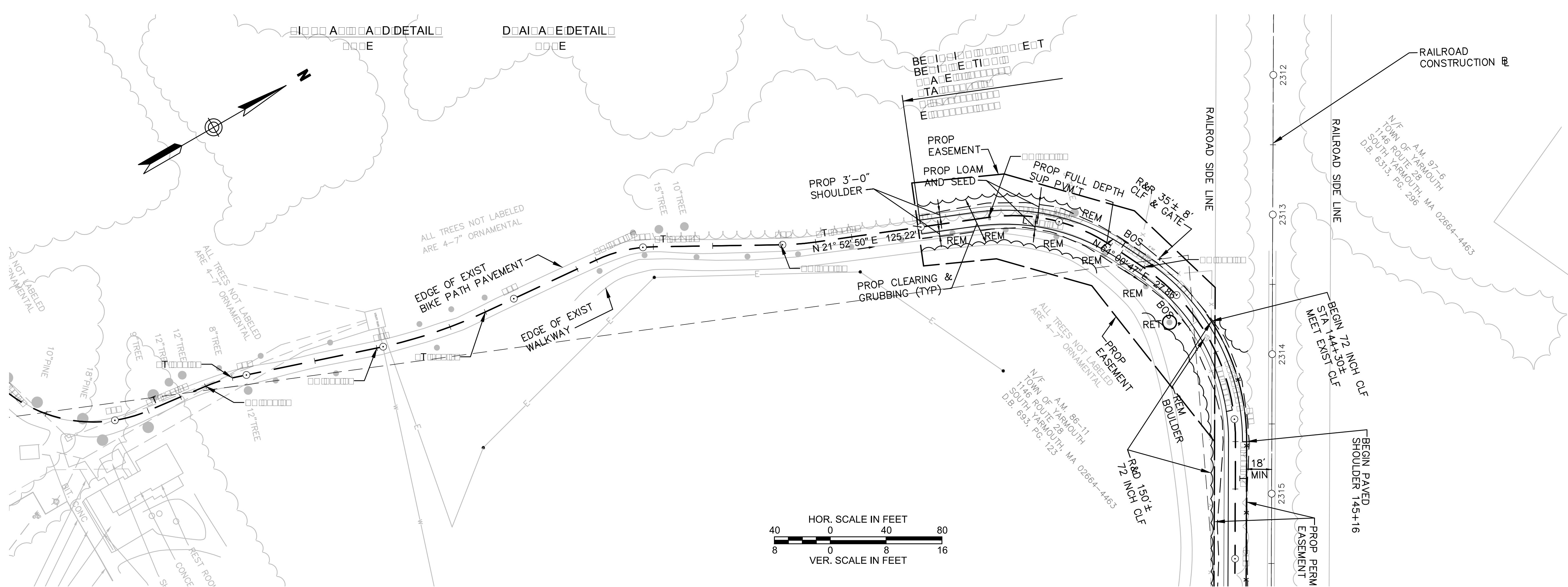
CONSTRUCTION BASELINE TIES				
POINT	TO POINT	BEARING	DISTANCE	REMARKS
TA1	TA2	S74°01'05" E	10.00	TA1
TA2	TA3	S74°00'43" E	10.00	TA2
TA3	TA4	S74°00'43" E	10.00	TA3
TA4	TA5	S74°00'43" E	10.00	TA4
TA5	TA6	S74°00'43" E	10.00	TA5
TA6	TA7	S74°00'43" E	10.00	TA6
TA7	TA8	S74°00'43" E	10.00	TA7
TA8	TA9	S74°00'43" E	10.00	TA8



YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

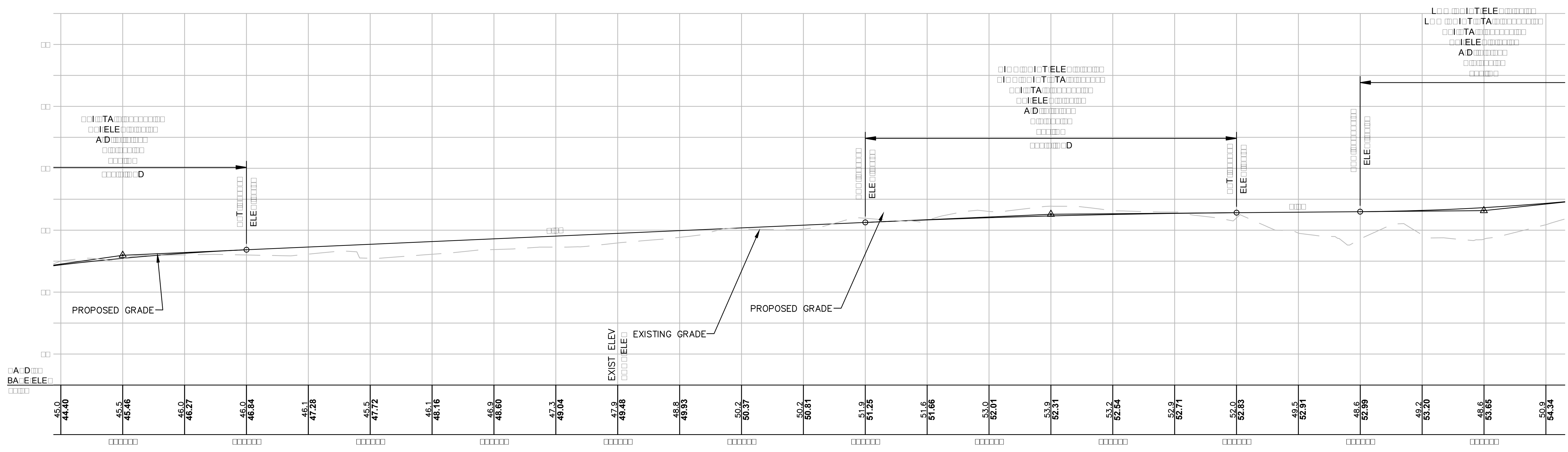
STATE	ED AID	FEET	TOTAL
MA	MTA		

CONSTRUCTION PLANS & PROFILES



CONTINUED ON  
SHEET NO. 17







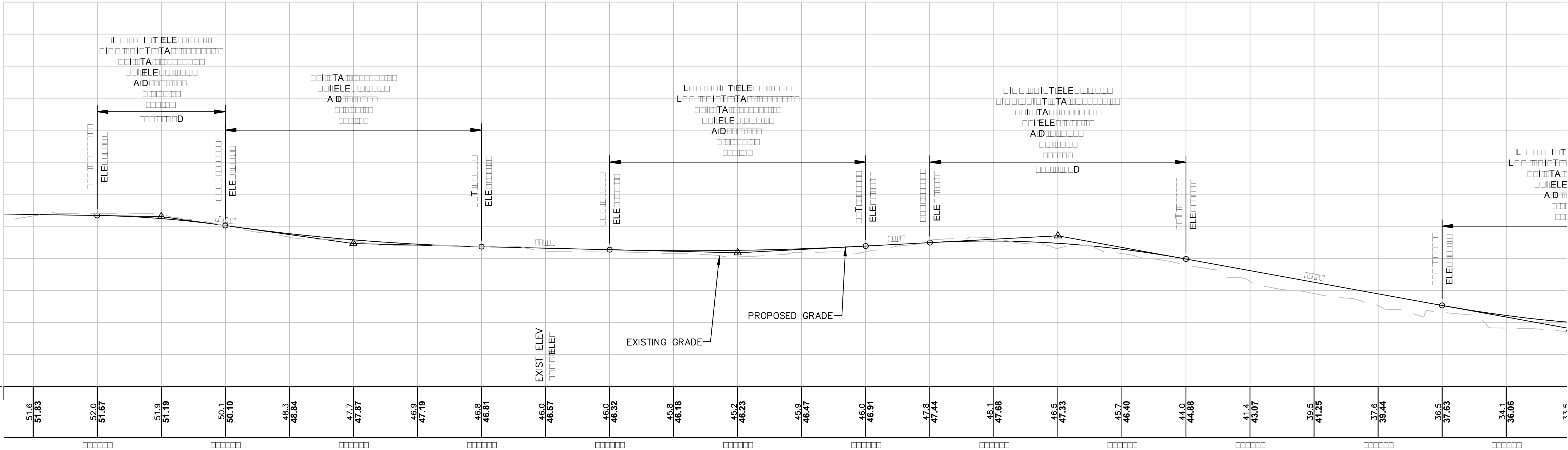
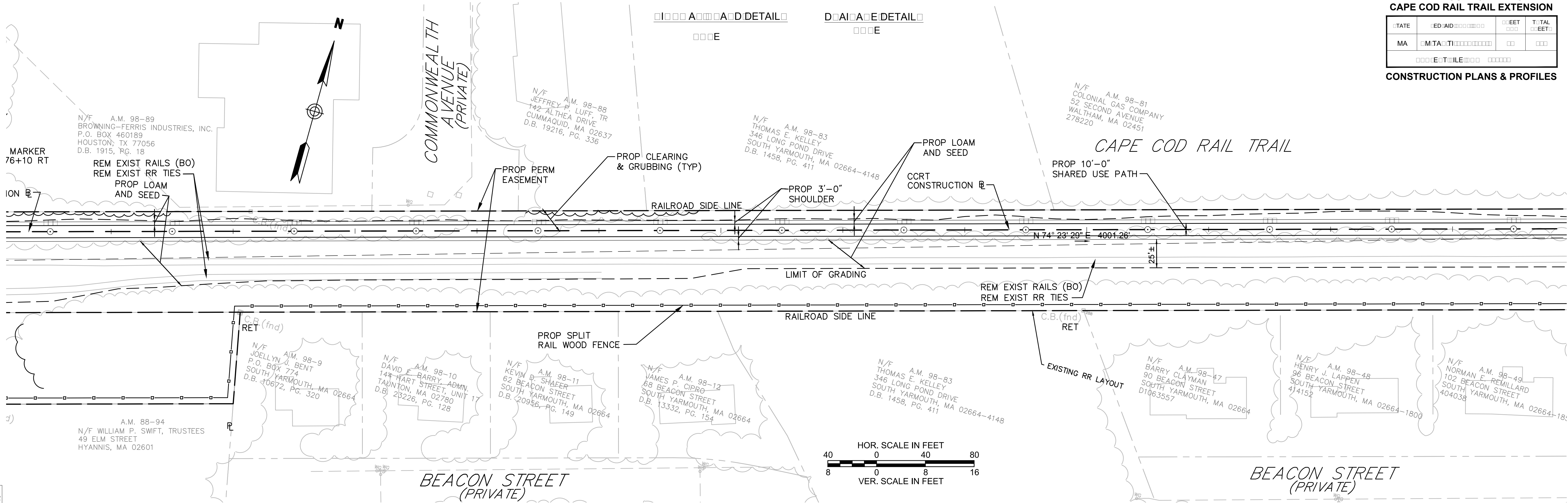


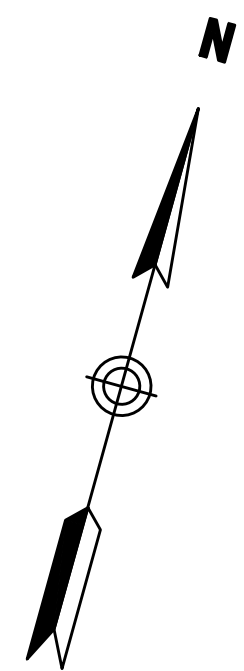
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	CM/TAP/TI-002S(758)X	19	185
PROJECT FILE NO. 604488			

N/T. A.M. 98-89  
BROWNING-FERRIS INDUSTRIES, INC.  
P.O. BOX 460189  
HOUSTON, TX 77056  
D.B. 1915, PG. 18









Legend for symbols: A, D, E, and detail callouts.

YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

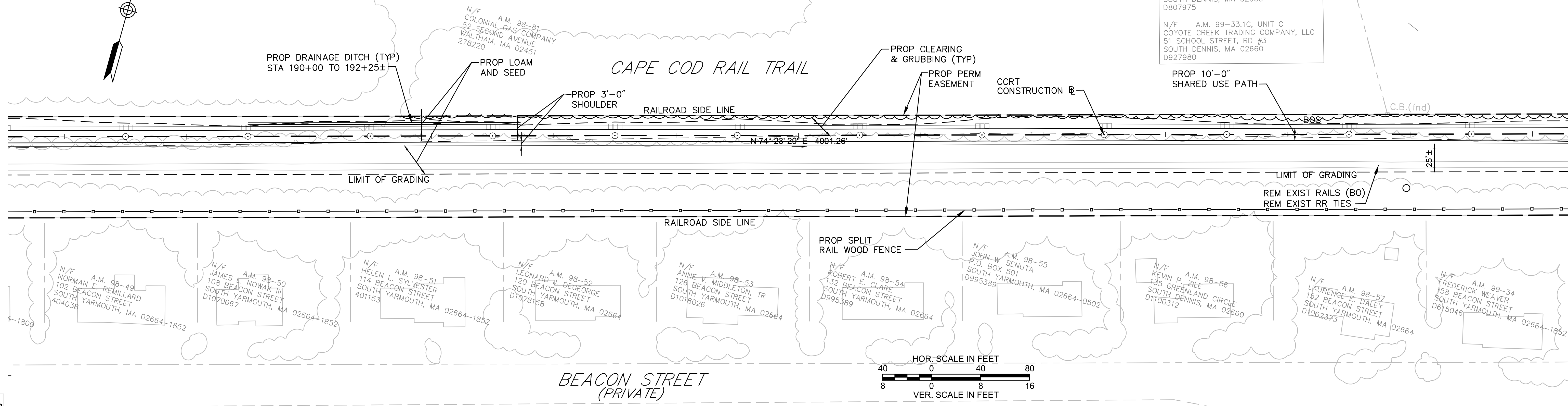
STATE	ED AID	FEET	TOTAL
MA	MTA		

CONSTRUCTION PLANS & PROFILES

N/F A.M. 99-33.1C, UNIT A  
NICKERSON LUMBER COMPANY  
P.O. BOX 1418  
SOUTH DENNIS, MA 02660-1418  
D947221

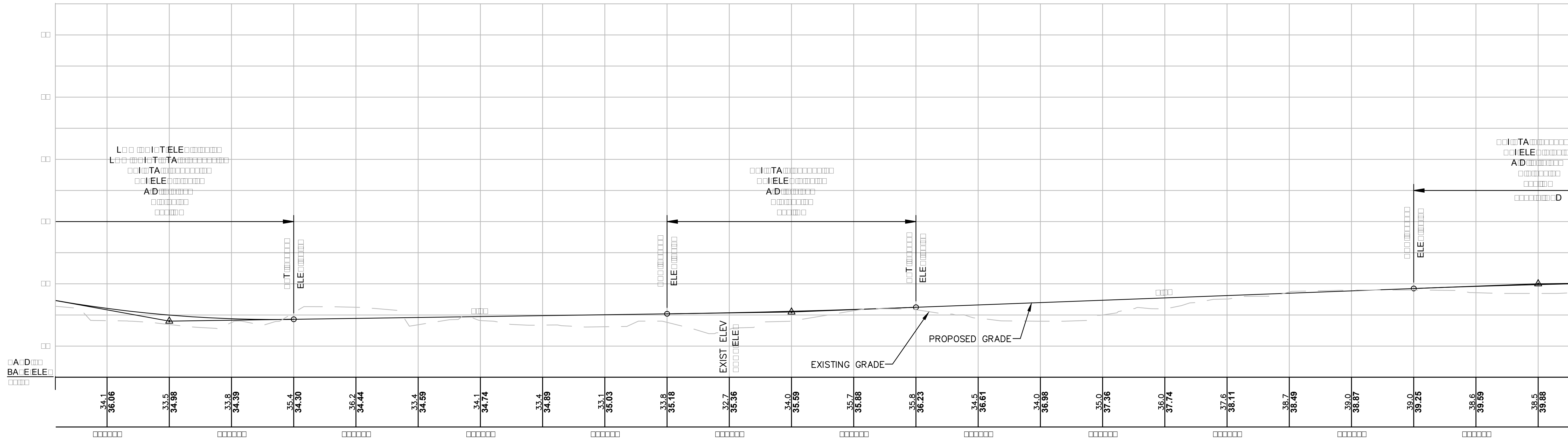
N/F A.M. 99-33.1C, UNIT B  
COYOTE CREEK TRADING COMPANY, LLC  
51 SCHOOL STREET, RD #3  
SOUTH DENNIS, MA 02660  
D807975

N/F A.M. 99-33.1C, UNIT C  
COYOTE CREEK TRADING COMPANY, LLC  
51 SCHOOL STREET, RD #3  
SOUTH DENNIS, MA 02660  
D927980

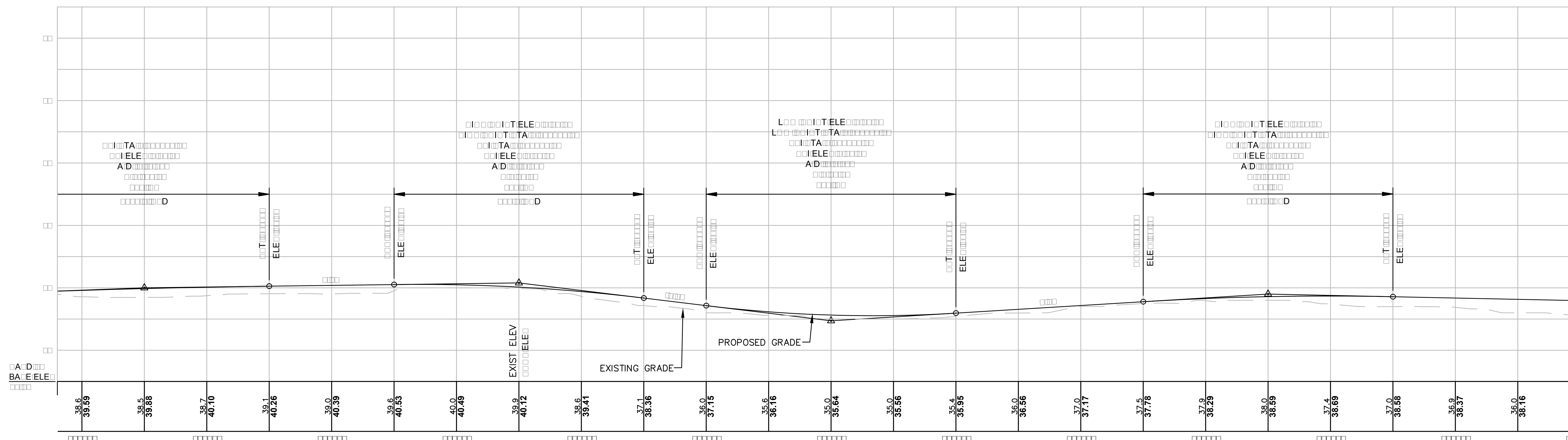


CONTINUED ON  
SHEET NO. 20

CONTINUED ON  
SHEET NO. 22

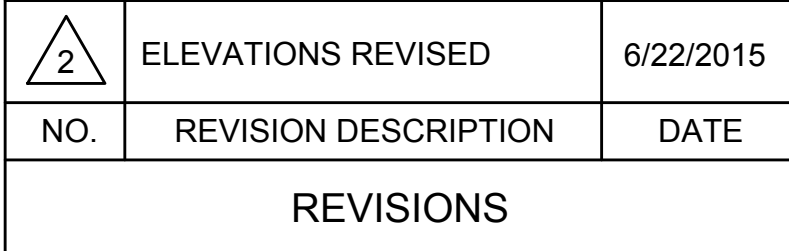
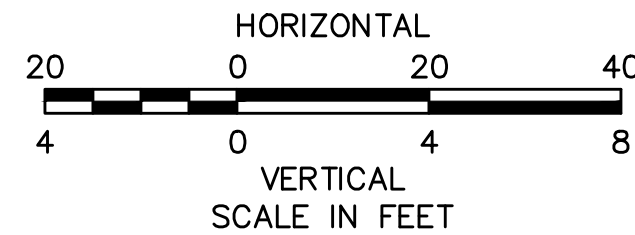













	ELEVATIONS REVISED	6/22/2015
NO.	REVISION DESCRIPTION	DATE
REVISIONS		

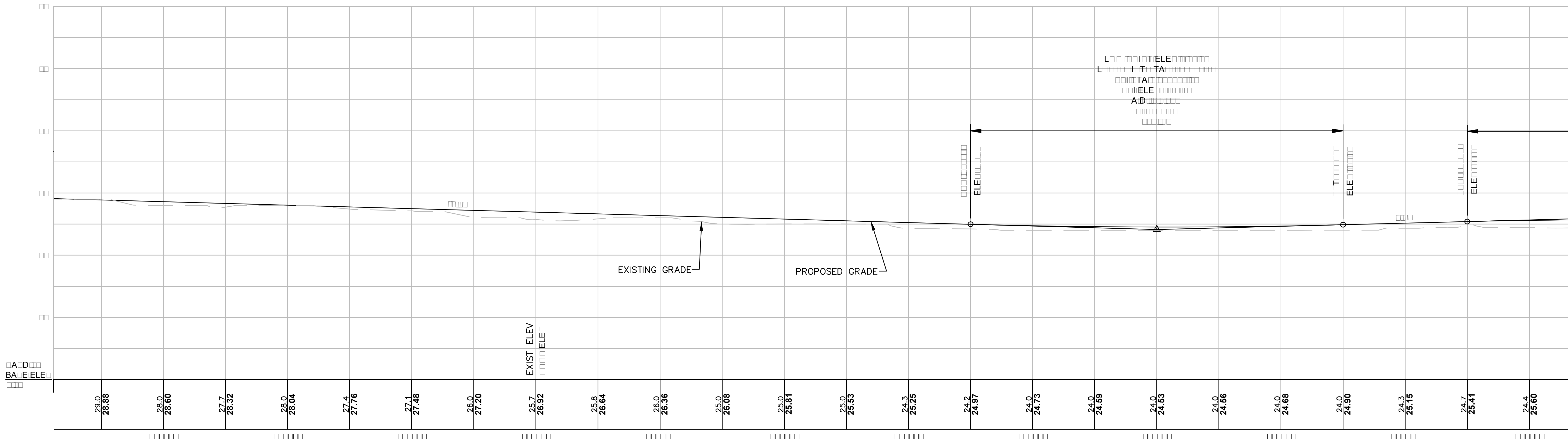
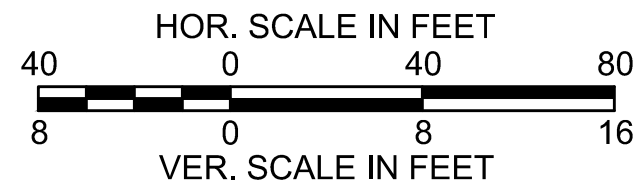
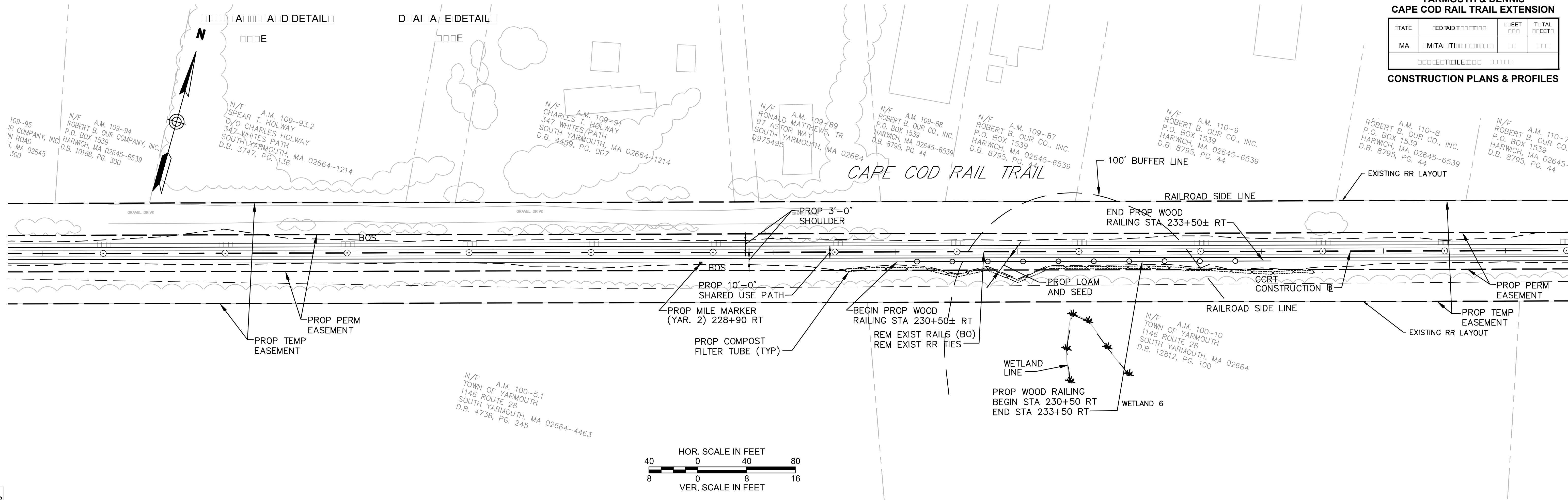
CONTINUED ON  
SHEET NO. 23

CONTINUED ON  
SHEET NO. 26

YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	ED AID	FEET	TOTAL
MA	MTA		

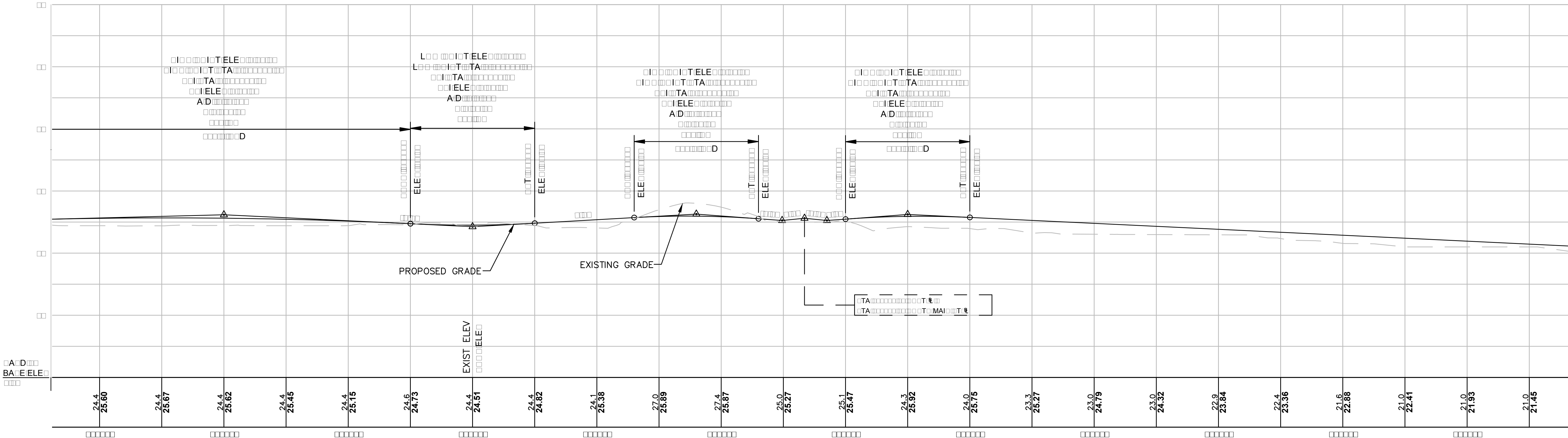
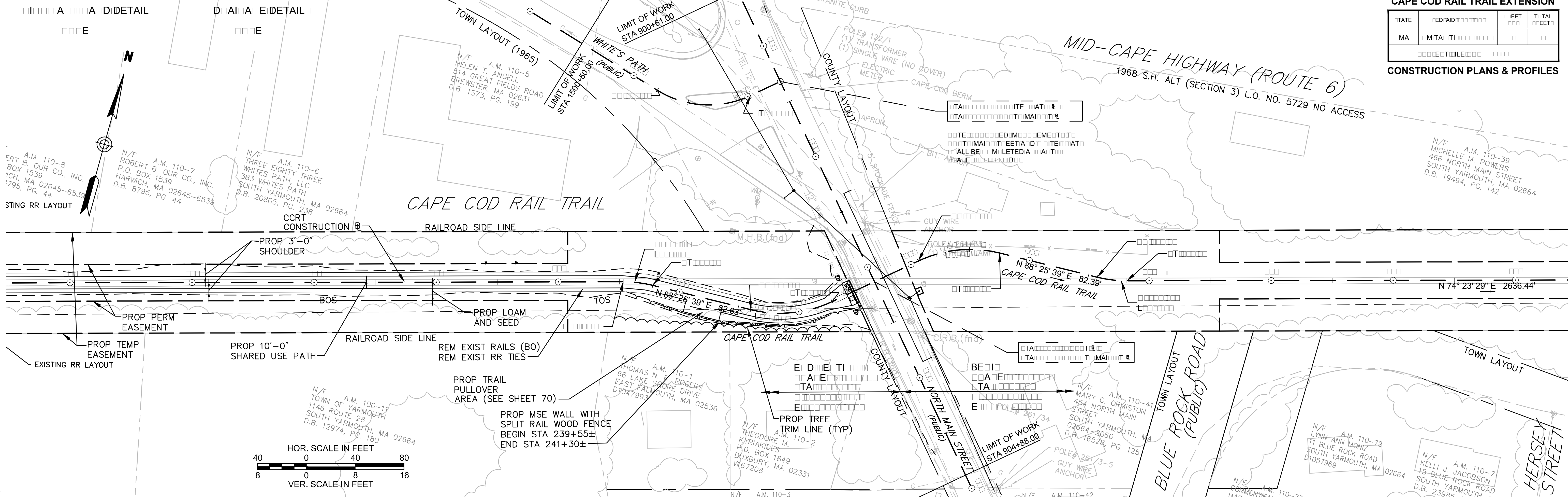
CONSTRUCTION PLANS & PROFILES



YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	ED AID	SHEET	TOTAL
MA	MTA		

CONSTRUCTION PLANS & PROFILES

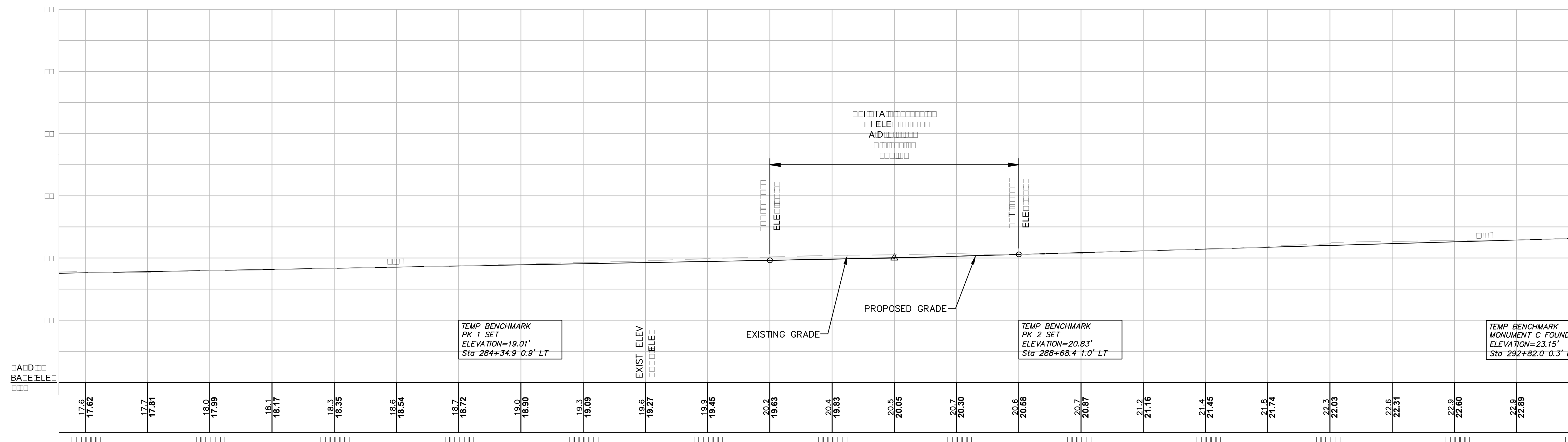
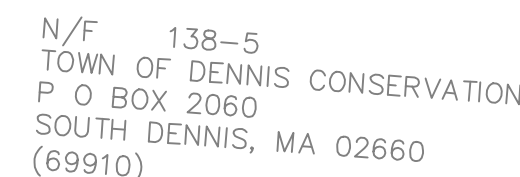


CONTINUED ON  
SHEET NO. 25



DATE	ED/AID	EET	TOTAL EET
MA	MTA/TI		
ET/ILE			

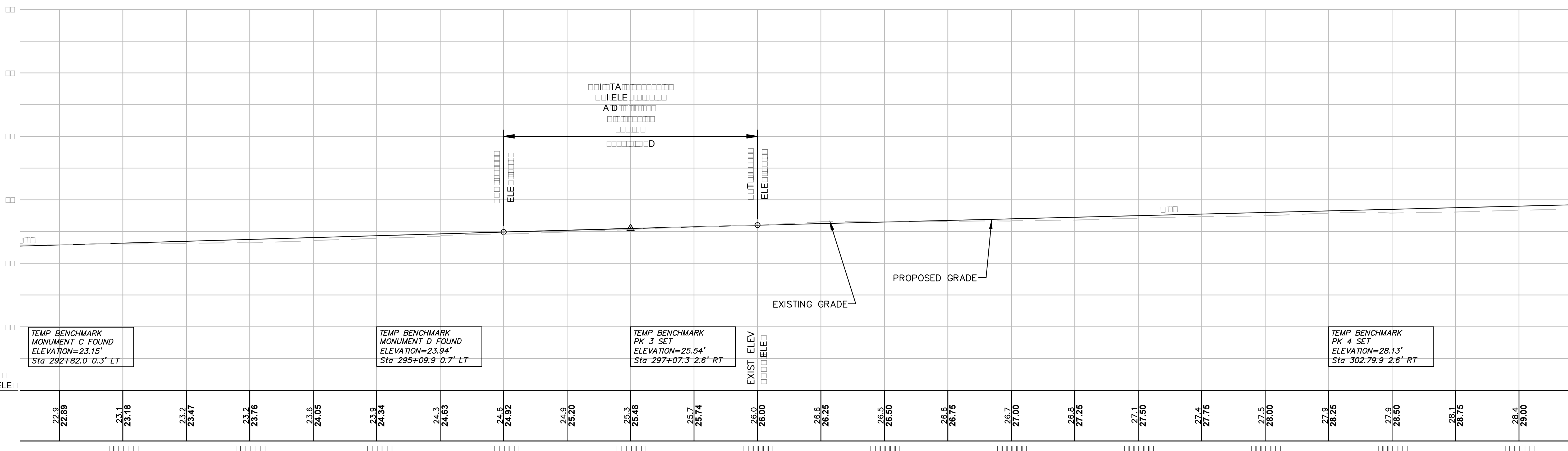
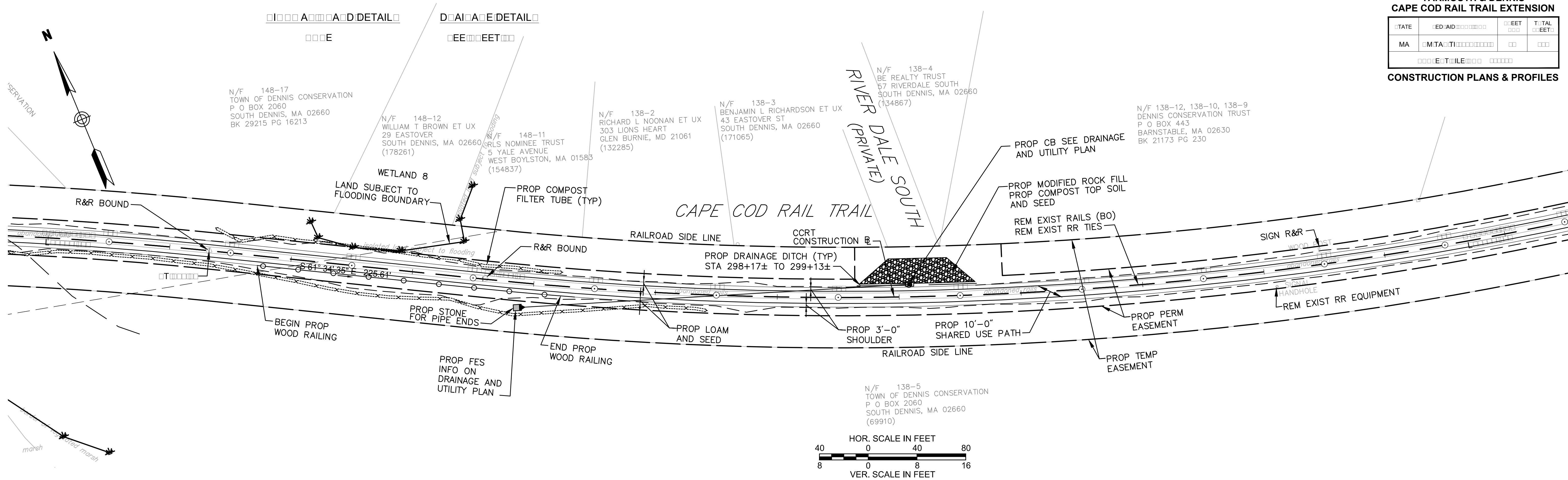
RESERVATION



YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	ED AID	FEET	TOTAL
MA	MTA		
E: TITLE			

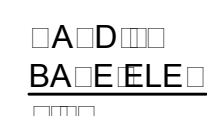
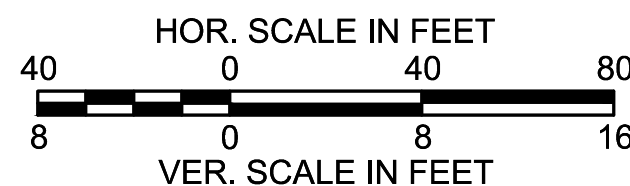
CONSTRUCTION PLANS & PROFILES



CONTINUED ON  
SHEET NO. 27

CONTINUED ON  
SHEET NO. 23

DATE	ED/AID	EET	TOTAL EET
MA	MTA/TI		
ETILE			

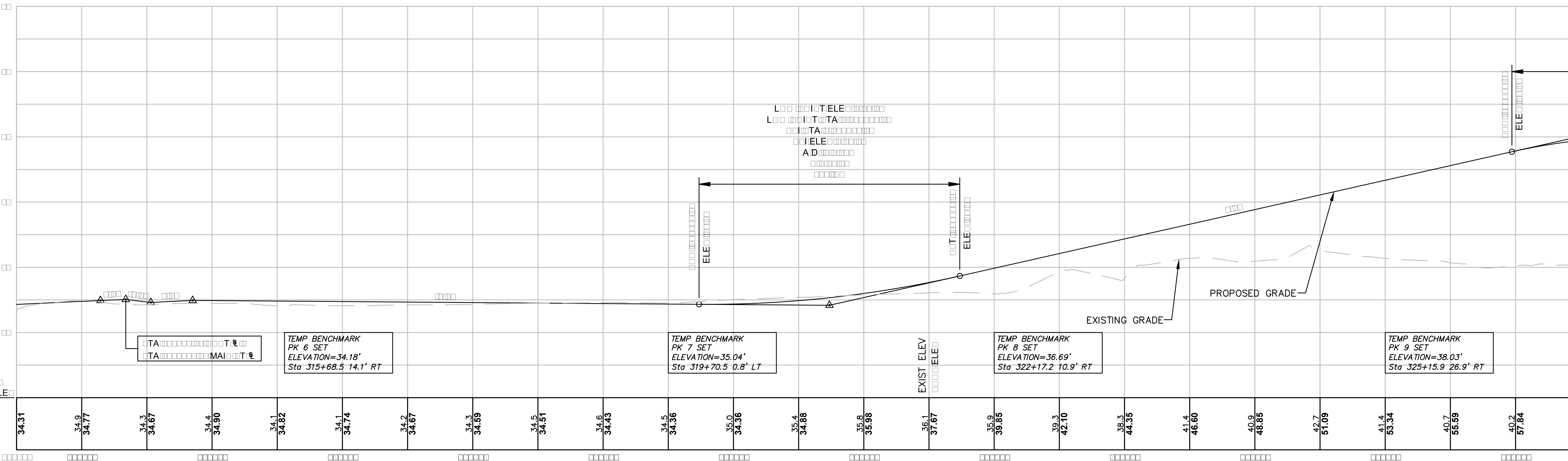
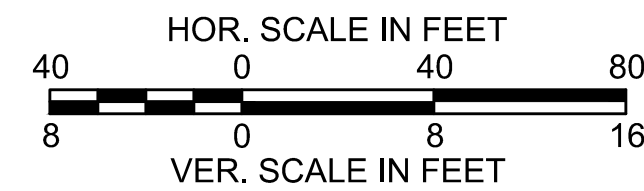
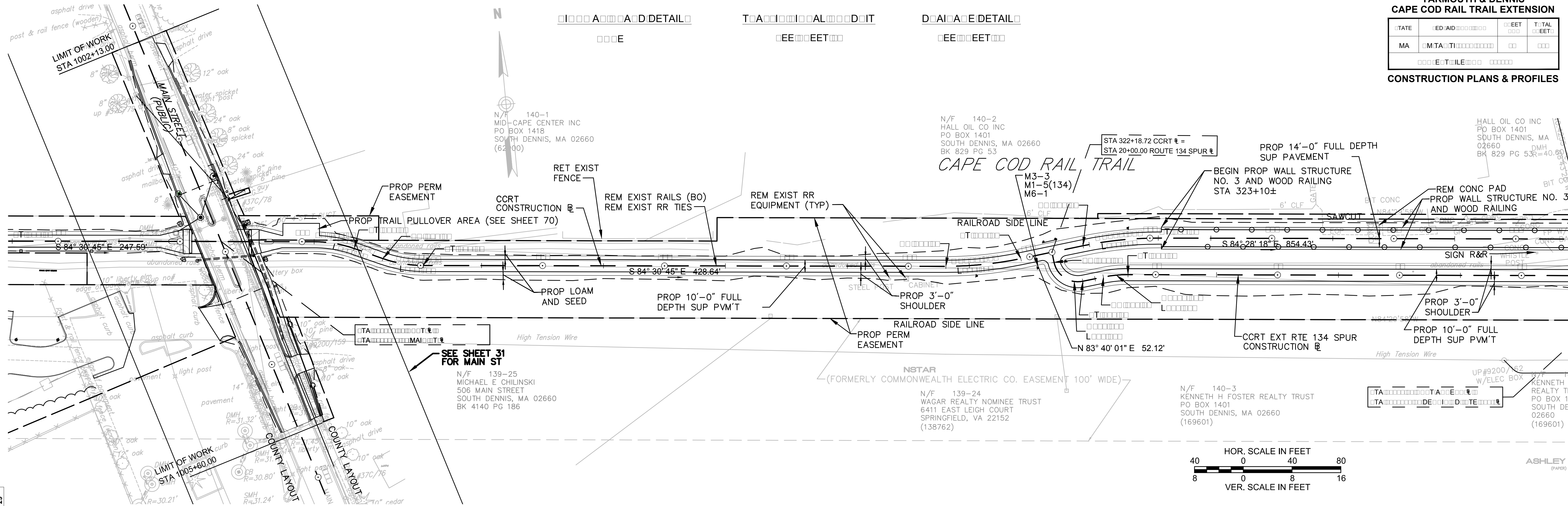


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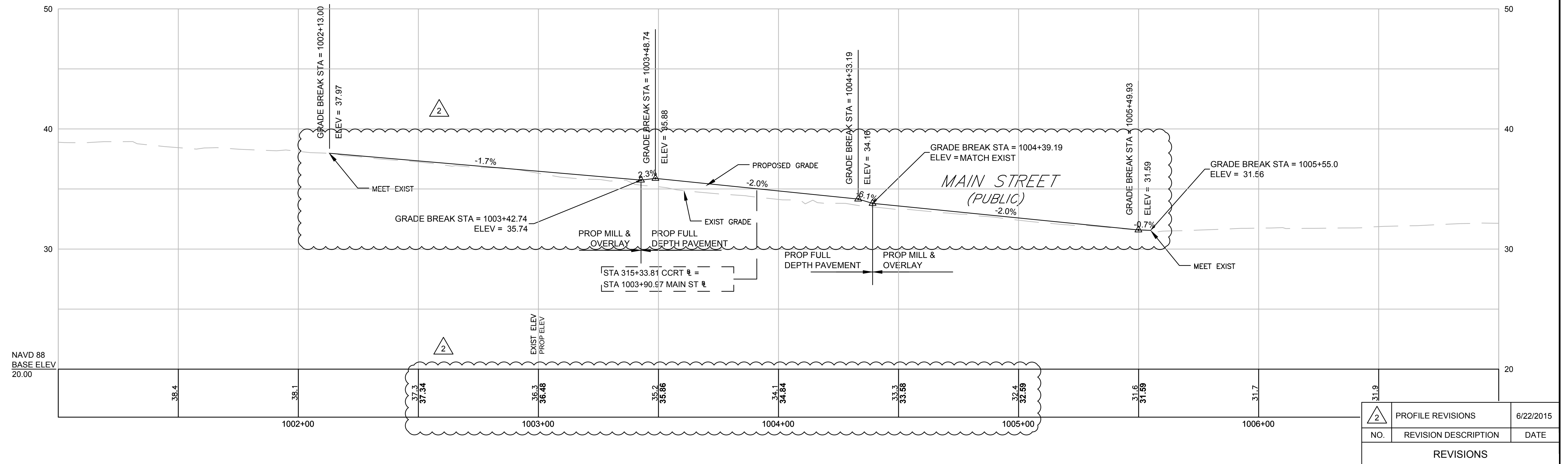
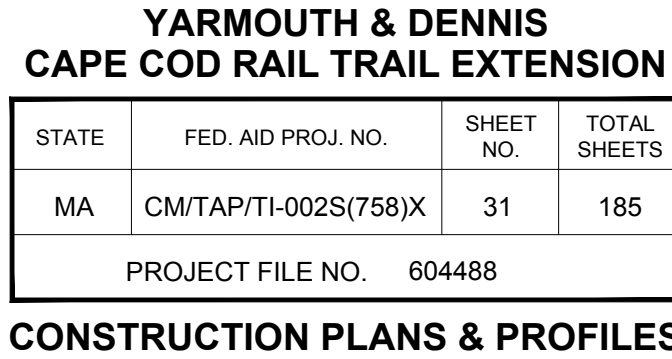


YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

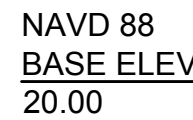
STATE	ED AID	FEET	TOTAL
MA	MTA		
CONSTRUCTION PLANS & PROFILES			










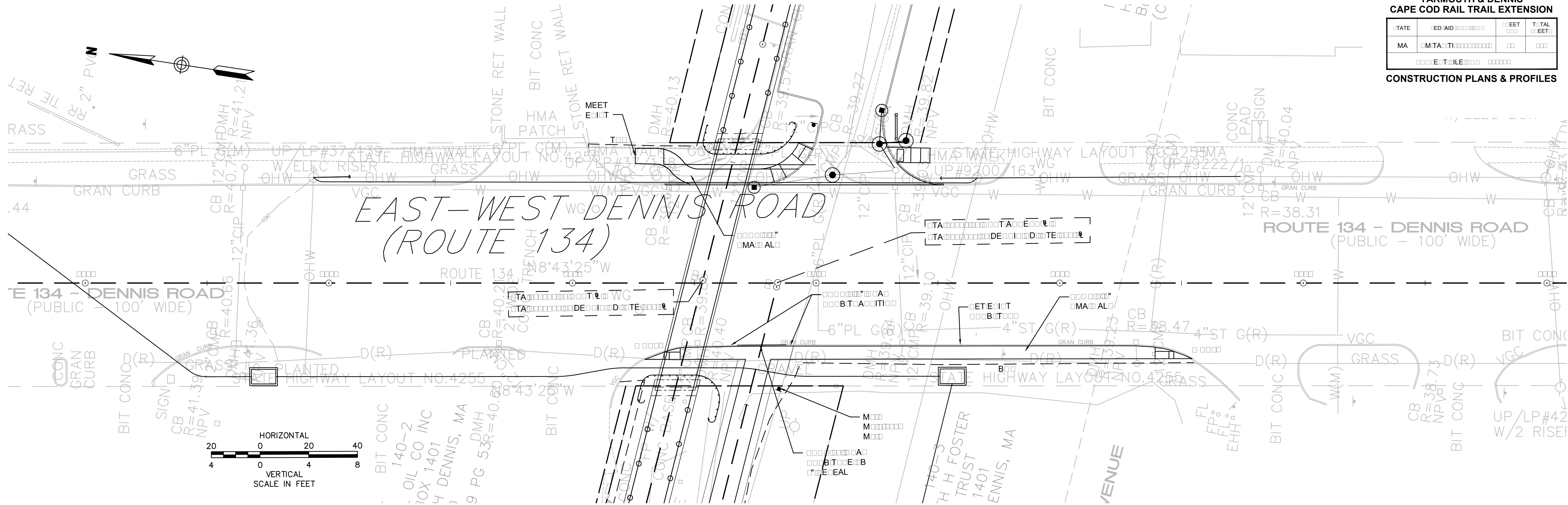


	PROFILE AND RETAINING WALL REVISIONS	6/23/2015
NO.	REVISION DESCRIPTION	DATE
REVISIONS		

YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	ED AID	HEET	TOTAL
MA	MTA		

CONSTRUCTION PLANS & PROFILES



0' 10' 20' 30' 40' 50' 60' 70' 80' 90' 100'





STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/11-002S(758)X	35	185
PROJECT FILE NO. 604488			

**CONSTRUCTION PLANS PARKING**

STATE: MASS. FED. AID PROJ. NO. CM/TAP/11-002S(75B)X SHEET NO. 35 TOTAL SHEETS 185  
PROJECT FILE NO. 604488

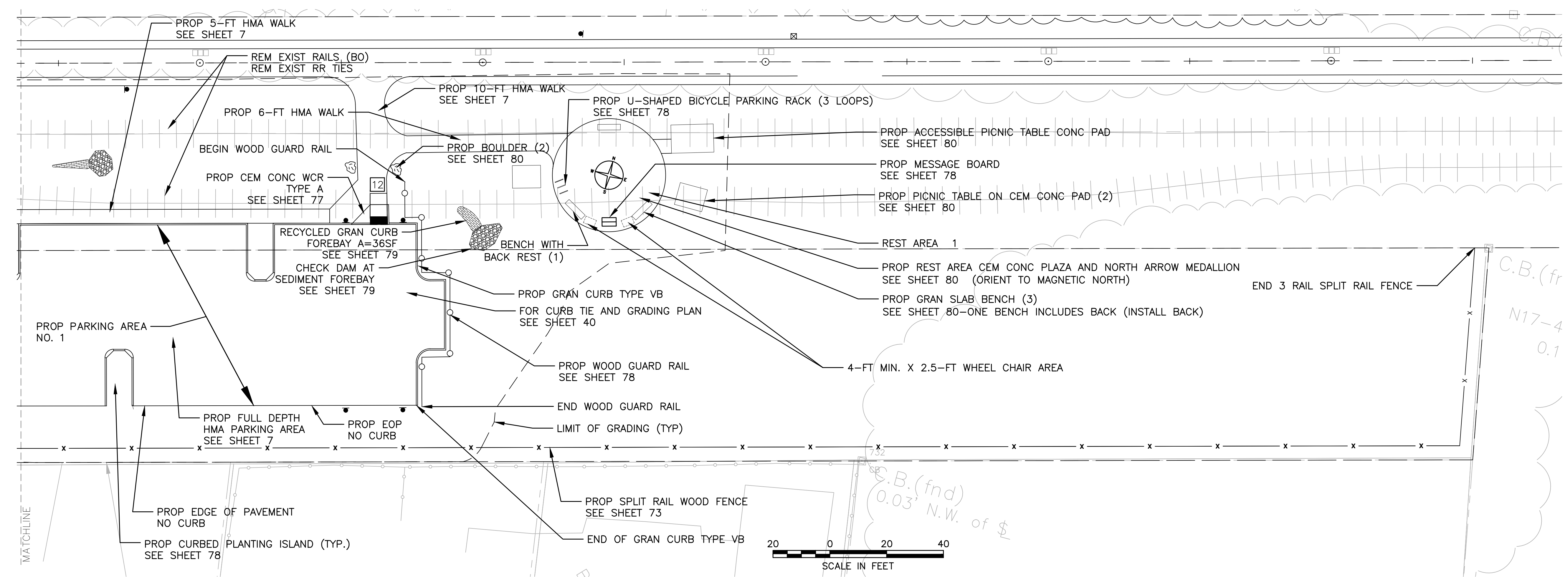
**Annotations and Callouts:**

- HIGHWAY GUARD DETAILS 174+75 - 174+90 WOOD GUARD RAIL SEE SHEET 40
- DRAINAGE DETAILS SEE SHEET 40
- LIMIT OF HMA DRIVE PAVEMENT
- PROP 5-FT WIDE HMA WALK SEE SHEET 7
- PROP GRAN CURB TYPE VB
- LIMIT OF GRADING (TYP)
- CHECK DAM AT SEDIMENT FOREBAY SEE SHEET 79
- RECYCLED GRAN CURB FOREBAY A=23SF SEE SHEET 79
- PROP CURBED PLANTING ISLAND (TYP.) SEE SHEET 78
- PROP GRAN CURB TYPE VB (TYP)
- REM EXIST RAILS (B0) REM EXIST RR TIES
- CHECK DAM AT SEDIMENT FOREBAY SEE SHEET 79
- RECYCLED GRAN CURB FOREBAY A=27SF SEE SHEET 79
- LIMIT R&R GRAN CURB BEGIN GRAN CURB TYPE VB LIMIT R&R GRAN CURB
- R&D GRAN CURB STONE
- PROP 6-FT WIDE HMA WALK SEE SHEET 7 MEET EXISTING SIDEWALK
- PROP 24-FT WIDE HMA DRIVE SEE SHEET 7
- PROP CEM CONC WCR TYPE B SEE SHEET 77
- PROP LIMIT OF WALK
- R&D GRAN CURB STONE
- LIMIT R&R GRAN CURB
- PROP CEM CONC WCR TYPE B SEE SHEET 77
- GRAN CURB TYPE VB
- LIMIT R&R GRAN CURB
- PROP 6-FT WIDE HMA WALK SEE SHEET 7 MEET EXISTING SIDEWALK
- END OF GRAN CURB TYPE VB
- BEGIN 3 RAIL SPLIT RAIL FENCE
- CCRT IDENTIFIER SIGN SEE SHEET 78 SEE SHEET 45 FOR TRAFFIC SIGNS AND PAVEMENT MARKINGS
- SEE SHEET 77 FOR WCR IDENTIFICATION
- PROP CLEARING AND GRUBBING WITHIN LIMIT OF GRADING
- GRAN CURB CORNER TYPE B (TYP) SEE SHEET 77
- PROP PARKING AREA NO. 1
- PROP EOP NO CURB (TYP)
- PROP FULL DEPTH HMA PARKING AREA SEE SHEET 7 10-FT X 20-FT PARKING SPACES (TYP.) 24- WIDE DRIVE AISLE (TYP.) TO MEET TOWN STANDARD
- PROP CURBED PLANTING ISLAND (TYP.) SEE SHEET 78
- FOR CURB TIE AND GRADING PLAN SEE SHEET 40
- PROP SPLIT RAIL FENCE
- MATCHLINE

**Scale:** 0 20 40 SCALE IN FEET

**Notes:**

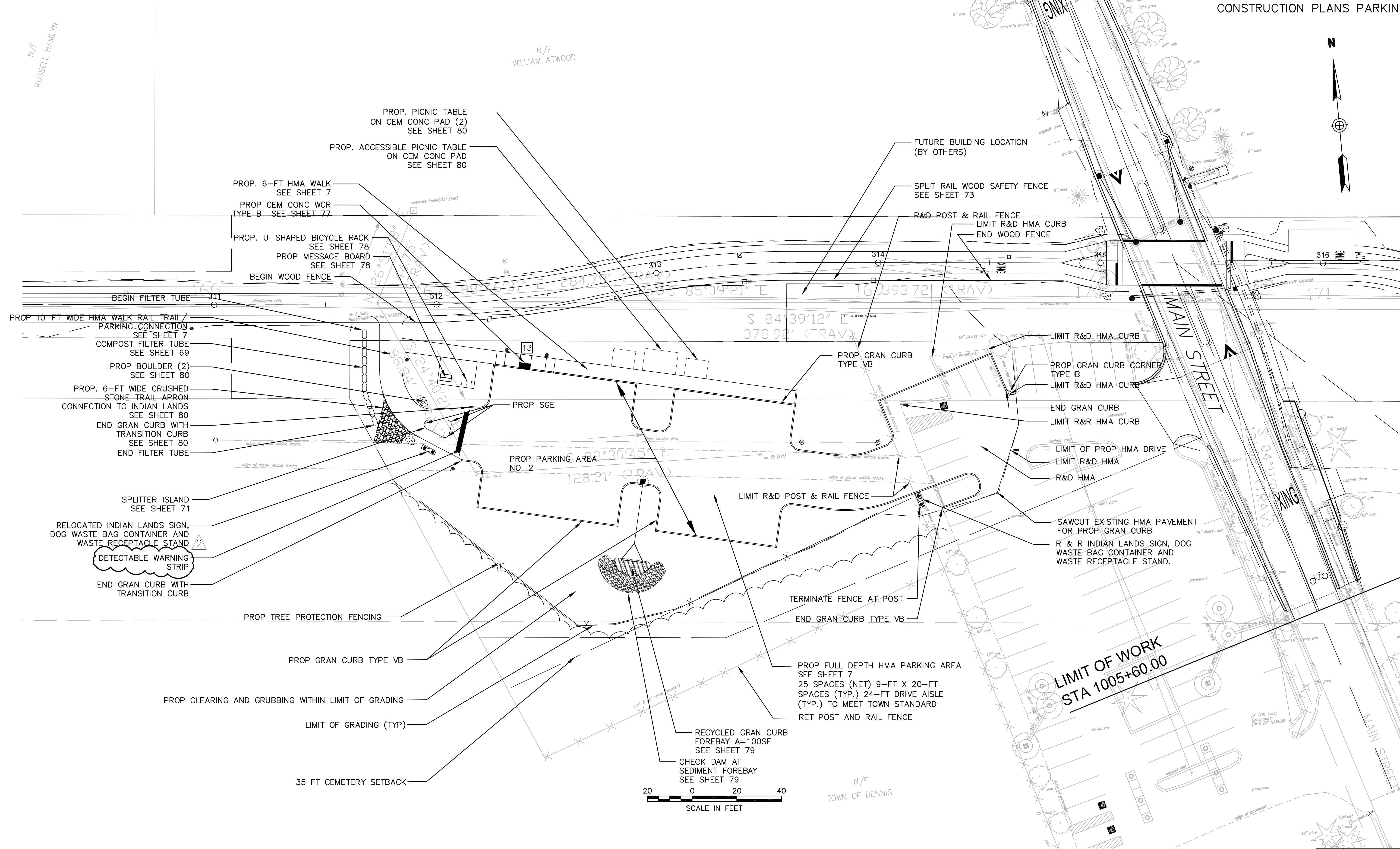
- N/F A.M. 98-111 COMMONWEALTH OF MASSACHUSETTS 1 ASHBURTON PLACE BOSTON, MA 02202 D.B. 3498, PG. 92
- N/F A.M. 98-1.1 500 STATION AVENUE SOUTH YARMOUTH, MA 02664 D.B. 16354, PG. 116
- 0.05' N.W. of \$



YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/11-0025(758)X	36	185
PROJECT FILE NO. 604488			

CONSTRUCTION PLANS PARKING AREA



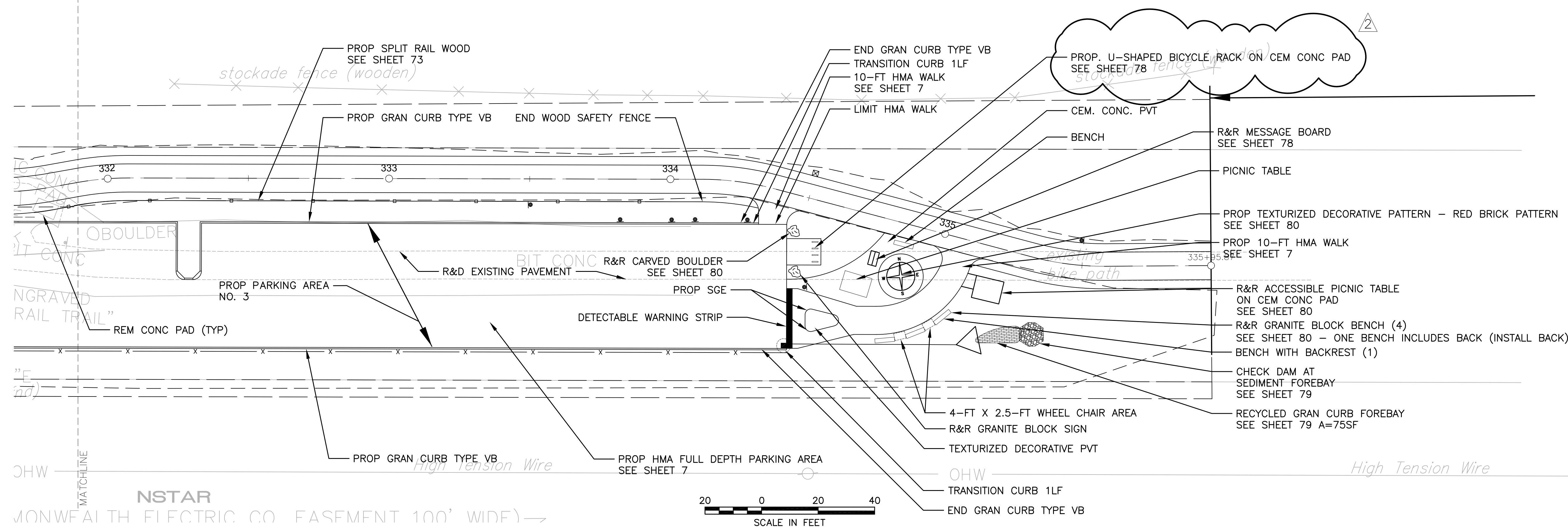
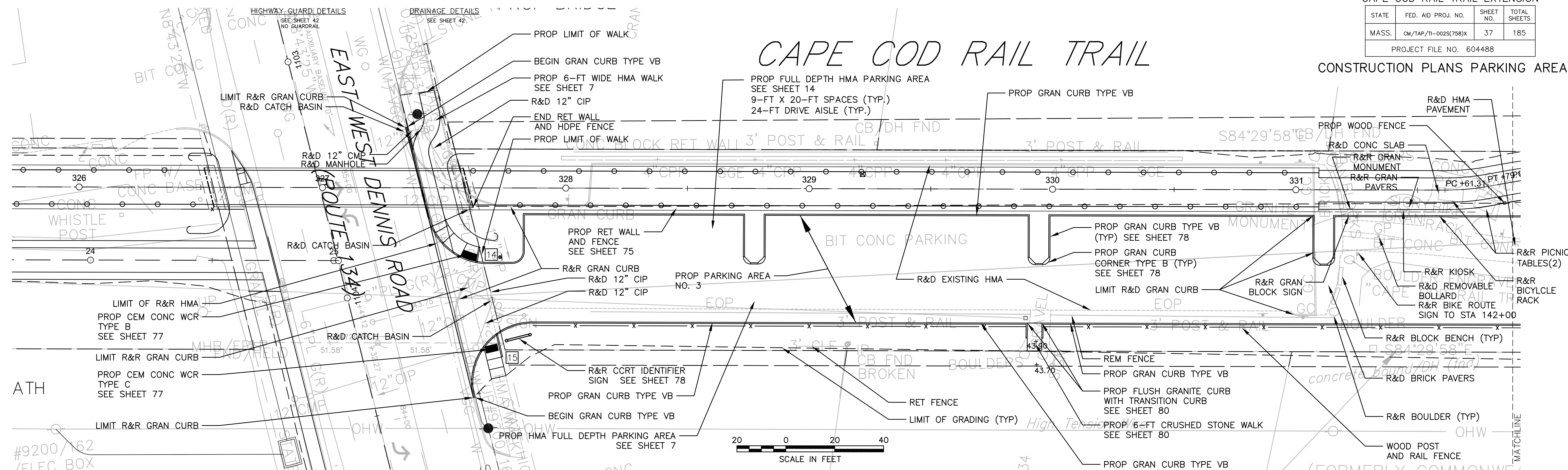
NO.	REVISION DESCRIPTION	DATE
2	NOTE REVISION	6/23/2015
REVISIONS		



YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/TI-0025(758)X	37	185
PROJECT FILE NO. 604488			

CONSTRUCTION PLANS PARKING AREA



NO.	REVISION DESCRIPTION	DATE
1	NOTE REVISION	6/23/2015
REVISIONS		



YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	CM/TAP/TI-002S(758)X	38	185

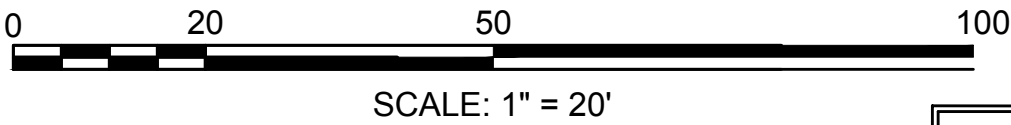
PROJECT FILE NO. 604488

CURB TIE & GRADING PLANS

Curve Table			
Curve #	Delta	Radius	Length
25	86° 54' 59"	5.00	7.58
26	180° 00' 00"	2.00	6.28
27	179° 59' 47"	2.00	6.28
28	179° 59' 47"	2.00	6.28
29	180° 00' 00"	2.00	6.28
30	151° 58' 37"	2.00	5.30
31	180° 00' 00"	2.00	6.28
32	180° 02' 32"	2.00	6.28
33	157° 22' 48"	2.00	5.49

DUPONT AVENUE CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L1	0+00.00	2714950.939	1013616.619		S17° 33' 32"E 516.19'	5+16.19	2714458.796	1013772.348
C1	5+16.19	2714458.796	1013772.348	R=720.00' Δ=37°12'48" L=467.63' T=242.40'		9+83.83	2714087.868	1014043.484

- NOTES:
- SEE CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION ON AT GRADE INTERSECTION WITH RAISED TABLE, SPLITTER ISLANDS, PULLOUT AREAS, AND WHEELCHAIR RAMPS.
  - ALL ELEVATIONS ALONG GUTTER LINE ARE FOR BOTTOM OF BERM.

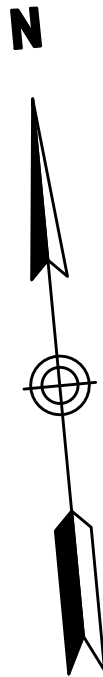


<div>2</div>	CURVE TABLE AND ELEVATION REVISIONS	6/23/2015
NO.	REVISION DESCRIPTION	DATE
REVISIONS		

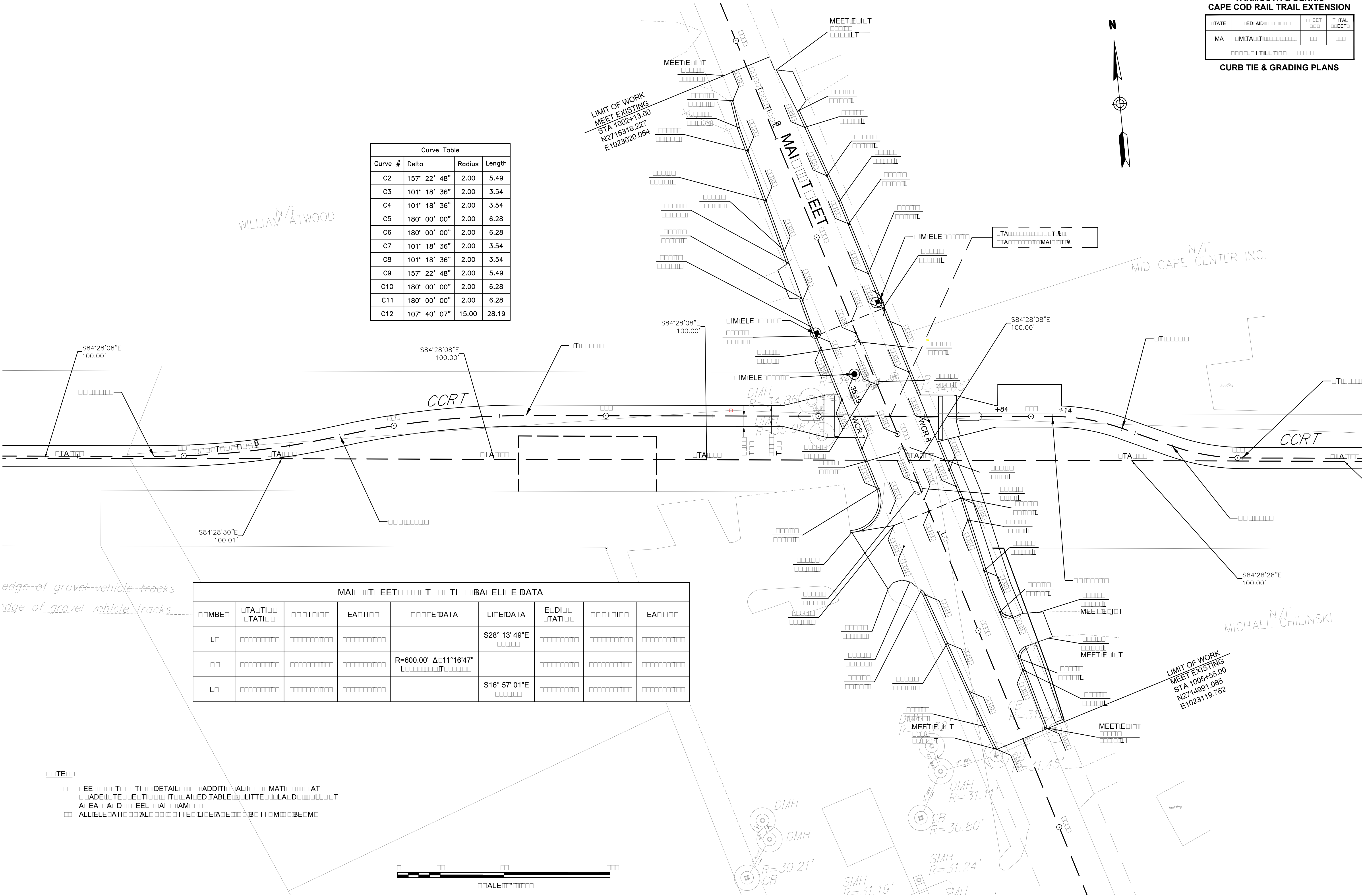
YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	ED AID	MEET	TOTAL
MA	MTA		

CURB TIE & GRADING PLANS



Curve Table			
Curve #	Delta	Radius	Length
C2	157° 22' 48"	2.00	5.49
C3	101° 18' 36"	2.00	3.54
C4	101° 18' 36"	2.00	3.54
C5	180° 00' 00"	2.00	6.28
C6	180° 00' 00"	2.00	6.28
C7	101° 18' 36"	2.00	3.54
C8	101° 18' 36"	2.00	3.54
C9	157° 22' 48"	2.00	5.49
C10	180° 00' 00"	2.00	6.28
C11	180° 00' 00"	2.00	6.28
C12	107° 40' 07"	15.00	28.19



N/F  
WILLIAM ATWOOD

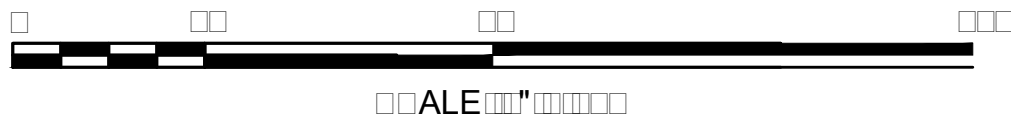
N/F  
MID CAPE CENTER INC.

N/F  
MICHAEL CHILINSKI

MAINTENANCE BASELINE DATA							
MBE	TA	T	EA	E DATA	LINE DATA	ED	EA
L					S28° 13' 49"E		
				R=600.00' Δ11°16'47"			
L					S16° 57' 01"E		

edge of gravel vehicle tracks  
edge of gravel vehicle tracks

- TE
- EE
- DE
- EA
- ALL



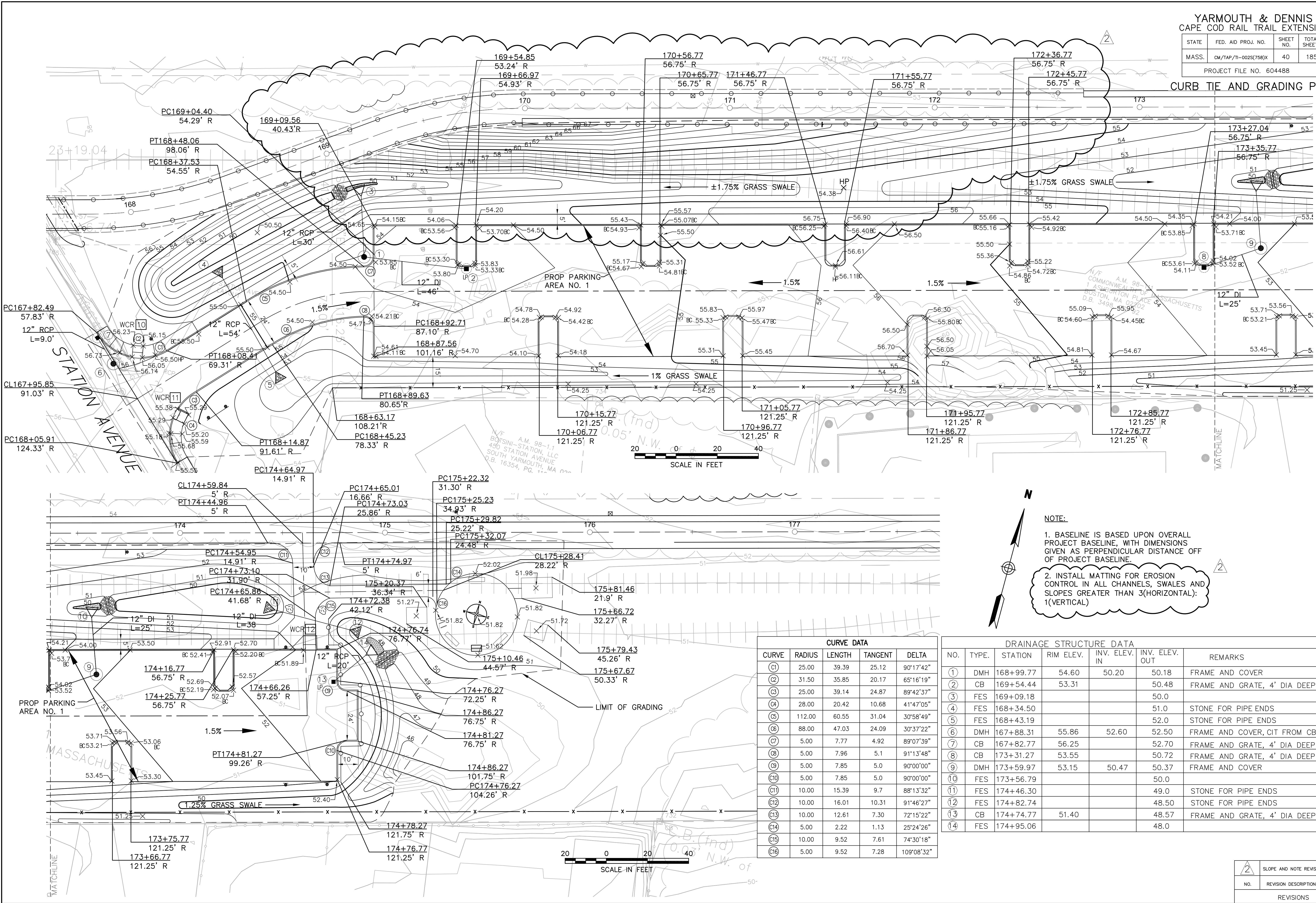


YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/TT-0025(758)X	40	185

PROJECT FILE NO. 604488

CURB TIE AND GRADING PLAN



NOTE:  
1. BASELINE IS BASED UPON OVERALL PROJECT BASELINE, WITH DIMENSIONS GIVEN AS PERPENDICULAR DISTANCE OFF OF PROJECT BASELINE.  
2. INSTALL MATTING FOR EROSION CONTROL IN ALL CHANNELS, SWALES AND SLOPES GREATER THAN 3(HORIZONTAL): 1(VERTICAL)

CURVE DATA				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
(C1)	25.00	39.39	25.12	90°17'42"
(C2)	31.50	35.85	20.17	65°16'19"
(C3)	25.00	39.14	24.87	89°42'37"
(C4)	28.00	20.42	10.68	41°47'05"
(C5)	112.00	60.55	31.04	30°58'49"
(C6)	88.00	47.03	24.09	30°37'22"
(C7)	5.00	7.77	4.92	89°07'39"
(C8)	5.00	7.96	5.1	91°13'48"
(C9)	5.00	7.85	5.0	90°00'00"
(C10)	5.00	7.85	5.0	90°00'00"
(C11)	10.00	15.39	9.7	88°13'32"
(C12)	10.00	16.01	10.31	91°46'27"
(C13)	10.00	12.61	7.30	72°15'22"
(C14)	5.00	2.22	1.13	25°24'26"
(C15)	10.00	9.52	7.61	74°30'18"
(C16)	5.00	9.52	7.28	109°08'32"

DRAINAGE STRUCTURE DATA						
NO.	TYPE.	STATION	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT	REMARKS
①	DMH	168+99.77	54.60	50.20	50.18	FRAME AND COVER
②	CB	169+54.44	53.31		50.48	FRAME AND GRATE, 4' DIA DEEP SUMP
③	FES	169+09.18			50.0	
④	FES	168+34.50			51.0	STONE FOR PIPE ENDS
⑤	FES	168+43.19			52.0	STONE FOR PIPE ENDS
⑥	DMH	167+88.31	55.86	52.60	52.50	FRAME AND COVER, CIT FROM CB
⑦	CB	167+82.77	56.25		52.70	FRAME AND GRATE, 4' DIA DEEP SUMP
⑧	CB	173+31.27	53.55		50.72	FRAME AND GRATE, 4' DIA DEEP SUMP
⑨	DMH	173+59.97	53.15	50.47	50.37	FRAME AND COVER
⑩	FES	173+56.79			50.0	
⑪	FES	174+46.30			49.0	STONE FOR PIPE ENDS
⑫	FES	174+82.74			48.50	STONE FOR PIPE ENDS
⑬	CB	174+74.77	51.40		48.57	FRAME AND GRATE, 4' DIA DEEP SUMP
⑭	FES	174+95.06			48.0	

NO.	REVISION DESCRIPTION	DATE
1	SLOPE AND NOTE REVISION	6/23/2015



YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

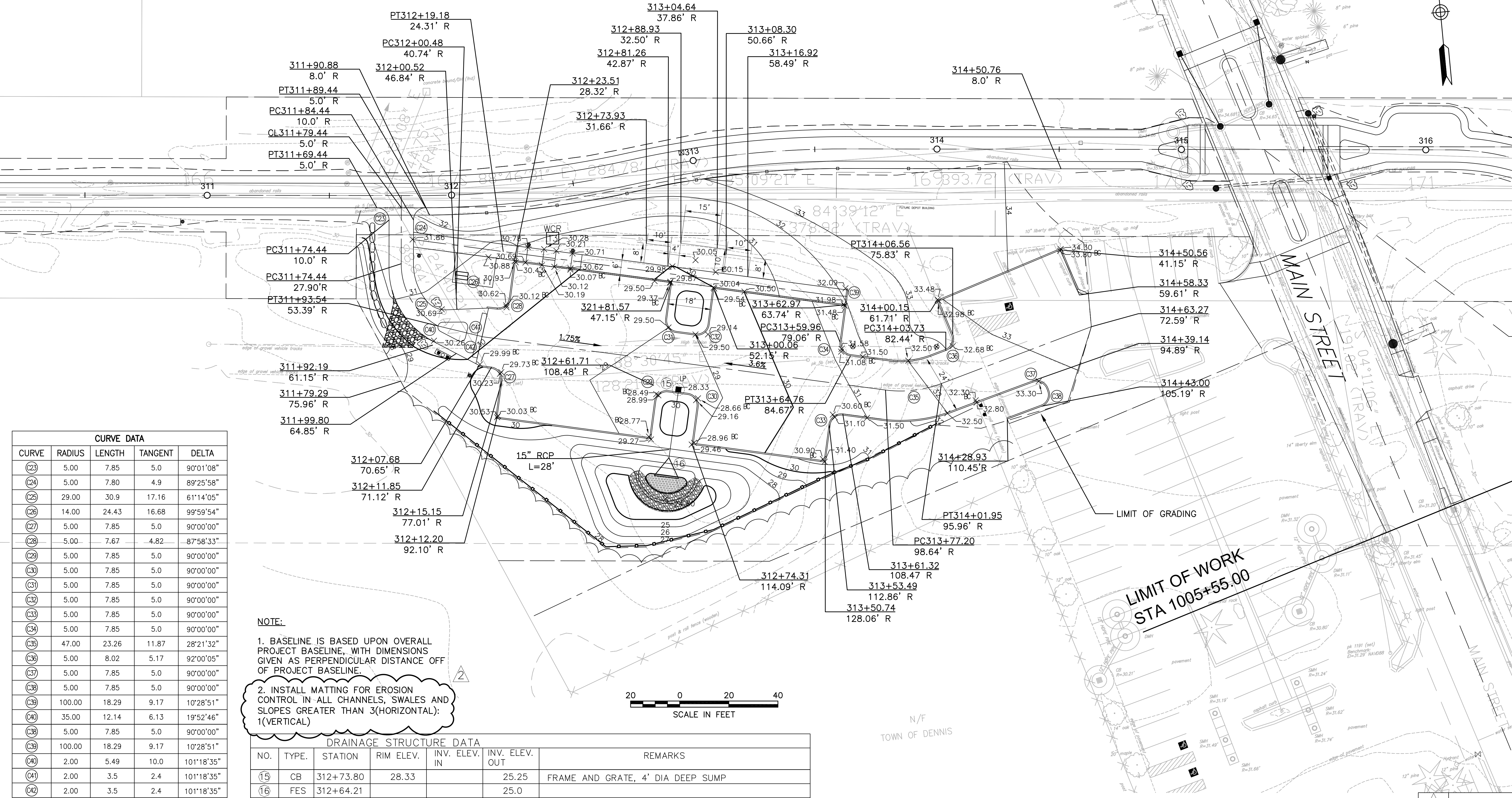
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/TT-0025(758)X	41	185
PROJECT FILE NO. 604488			

CURB TIE AND GRADING PLAN

N/F  
RUSSELL HAMILYN

N/F  
WILLIAM ATWOOD

N/F  
TOWN OF DENNIS



CURVE DATA				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
(23)	5.00	7.85	5.0	90°01'08"
(24)	5.00	7.80	4.9	89°25'58"
(25)	29.00	30.9	17.16	61°14'05"
(26)	14.00	24.43	16.68	99°59'54"
(27)	5.00	7.85	5.0	90°00'00"
(28)	5.00	7.67	4.82	87°58'33"
(29)	5.00	7.85	5.0	90°00'00"
(30)	5.00	7.85	5.0	90°00'00"
(31)	5.00	7.85	5.0	90°00'00"
(32)	5.00	7.85	5.0	90°00'00"
(33)	5.00	7.85	5.0	90°00'00"
(34)	5.00	7.85	5.0	90°00'00"
(35)	47.00	23.26	11.87	28°21'32"
(36)	5.00	8.02	5.17	92°00'05"
(37)	5.00	7.85	5.0	90°00'00"
(38)	5.00	7.85	5.0	90°00'00"
(39)	100.00	18.29	9.17	10°28'51"
(40)	35.00	12.14	6.13	19°52'46"
(38)	5.00	7.85	5.0	90°00'00"
(39)	100.00	18.29	9.17	10°28'51"
(40)	2.00	5.49	10.0	101°18'35"
(41)	2.00	3.5	2.4	101°18'35"
(42)	2.00	3.5	2.4	101°18'35"

NOTE:  
1. BASELINE IS BASED UPON OVERALL PROJECT BASELINE, WITH DIMENSIONS GIVEN AS PERPENDICULAR DISTANCE OFF OF PROJECT BASELINE.  
2. INSTALL MATTING FOR EROSION CONTROL IN ALL CHANNELS, SWALES AND SLOPES GREATER THAN 3(HORIZONTAL): 1(VERTICAL)

DRAINAGE STRUCTURE DATA					
NO.	TYPE	STATION	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT
15	CB	312+73.80	28.33		25.25
16	FES	312+64.21			25.0



2	NOTE REVISION	6/23/2015
NO.	REVISION DESCRIPTION	DATE
REVISIONS		

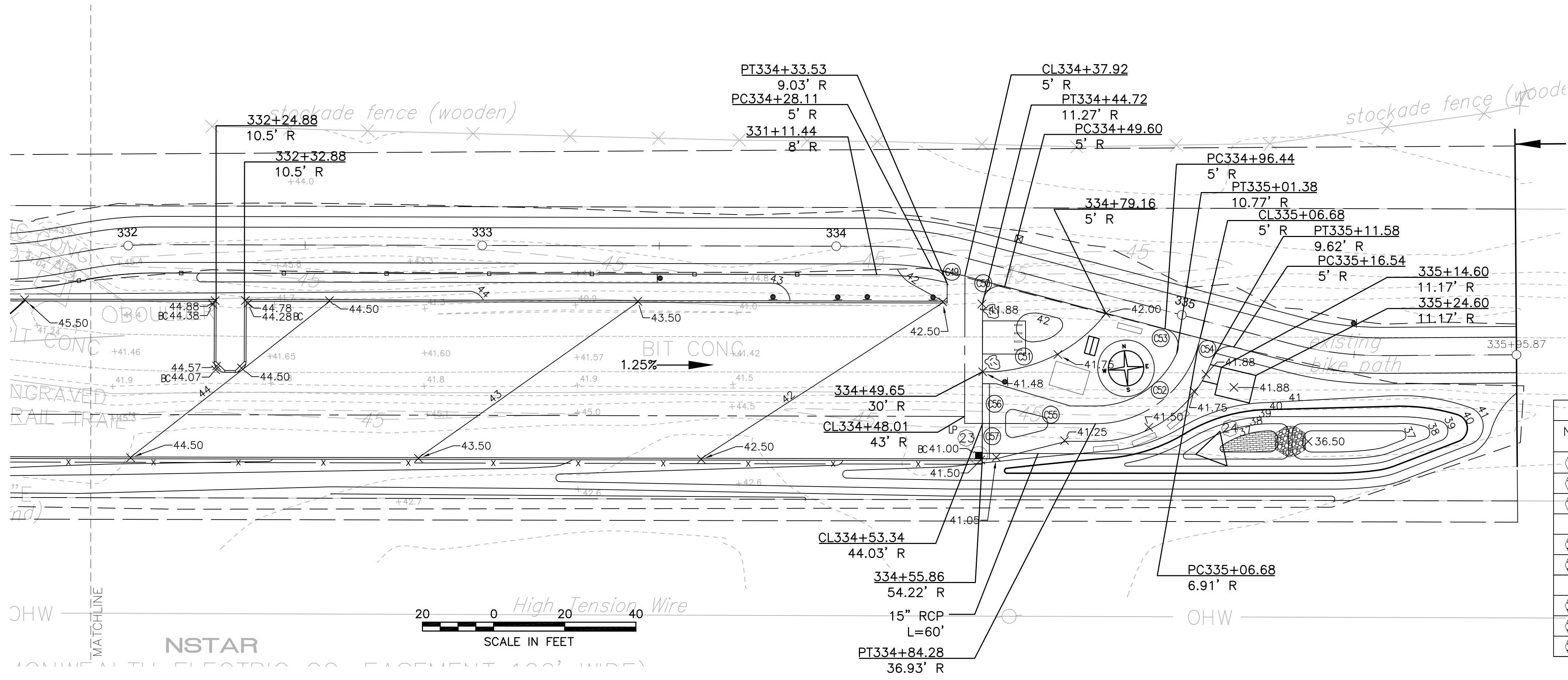
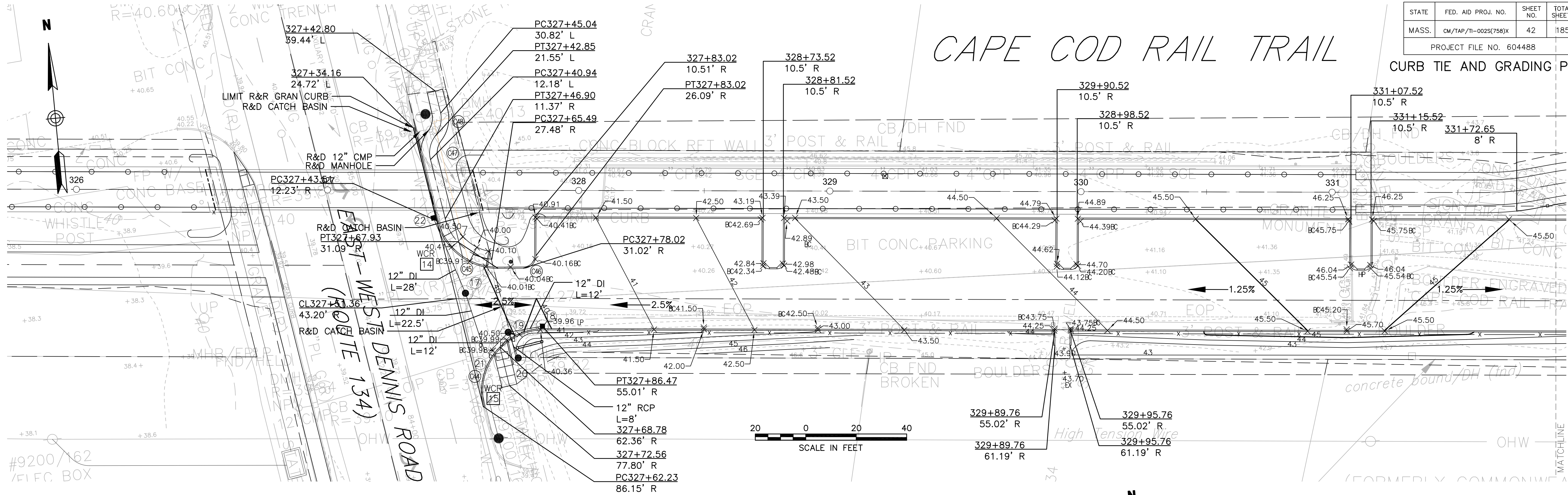


YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/TI-0025(758)X	42	185
PROJECT FILE NO. 604488			

CURB TIE AND GRADING PLAN

CAPE COD RAIL TRAIL



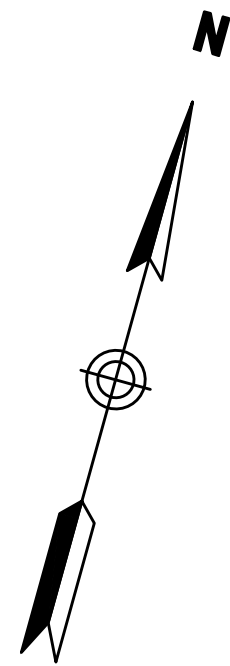
CURVE DATA				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
(34)	25.00	45.47	32.12	104°12'46"
(35)	25.00	33.24	19.60	76°11'54"
(36)	5.00	7.85	5.00	90°00'00"
(37)	8.00	7.10	3.80	51°31'17"
(38)	14.40	12.36	6.50	49°11'53"
(39)	5.00	7.01	4.22	80°23'48"
(40)	5.00	9.10	6.47	104°40'36"
(41)	43.00	40.06	21.63	53°25'00"
(42)	30.00	39.43	23.15	75°19'23"
(43)	5.00	8.63	5.84	98°53'36"
(44)	5.00	7.46	4.62	85°33'57"
(45)	2.00	5.30	8.00	151°55'39"
(46)	2.00	3.50	2.40	101°18'35"
(47)	2.00	3.50	2.40	101°18'35"

- NOTE:
1. BASELINE IS BASED UPON OVERALL PROJECT BASELINE, WITH DIMENSIONS GIVEN AS PERPENDICULAR DISTANCE OFF OF PROJECT BASELINE.
  2. INSTALL MATTING FOR EROSION CONTROL IN ALL CHANNELS, SWALES AND SLOPES GREATER THAN 3(HORIZONTAL): 1(VERTICAL)

DRAINAGE STRUCTURE DATA						
NO.	TYPE.	STATION	RIM ELEV.	INV. ELEV. IN	INV. ELEV. OUT	RIM CONDITION
17	DMH	327+55.00	39.30	36.40	36.30	FRAME AND COVER
18	CB	327+85.81	39.96		36.50	FRAME AND GRATE, 4' DIA DEEP SUMP
19	DMH	327+72.11	39.95	36.40	(a)36.1 (b)36.3	FRAME AND COVER
20	LB	327+76.08	41.0	36.0		FRAME AND COVER 8' DIA, 2' STONE
21	EX (MH)	327+63.20	39.82	(a)36.2 (b)36.2	35.9 (EST)	FRAME AND COVER
22	CB	327+42.18	39.60		36.60	FRAME AND GRATE, 4' DIA DEEP SUMP
23	CB	334+56.66	41.0		37.92	FRAME AND GRATE, 4' DIA DEEP SUMP
24	FES	335+18.61			37.0	

NO.	REVISION DESCRIPTION	DATE
1	NOTE REVISION	6/23/2015
REVISIONS		





LIST OF MATERIALS		
ITEM NO.	DESCRIPTION	QUANTITY
1	14' GALVANIZED STEEL POST (1-SIDED)	2
2	W11-1SP SIGN, 30"x30"	2
3	W16-7p(R) SIGN, 24"x12"	2
4	W16-7p(L) SIGN, 24"x12"	2
5	SP-1, 9"x12" MTD FACING CURB OPENING	2
6	RRFB (1-SIDED)	2
7	CONTROL CABINET	2
8	INFRARED CAMERA	2
9	PROP 14' GALVANIZED STEEL POST W/SIDE OF POST MOUNTED CONTROL CABINET W/RRFB (1-SIDED) W/TWO W11-1SP, W16-7p(L), W16-7p(R) & SP-1 W/INFRARED CAMERA DETECTOR STA 4+99.7, 22.4' RT SEE NOTE 6	2
10	PROP 3" ELECTRICAL CONDUIT TYPE NM PLASTIC (UL) (TYP)	100
11	PROP POWER SOURCE PROP SERVICE CONNECTION W/INSTAR APPROVED HANDHOLE (POLYMER CONCRETE)	2
12	3' DYL W/9" GAPS (TYP)	100
13	PROP DETECTION ZONE (TYP)	2
14	PROP BICYCLE MARKINGS (TYP) (SEE DETAILS)	2
15	PROP ROADWAY MARKINGS (TYP) (SEE DETAILS)	2
16	PROP SPEED TABLE MARKINGS (TYP) (SEE DETAILS)	2
17	PROP 14' GALVANIZED STEEL POST W/RRFB (1-SIDED) W/TWO W11-1SP, W16-7p(L), W16-7p(R) & SP-1 W/INFRARED CAMERA DETECTOR STA 4+70.2, 23.0' LT SEE NOTE 6	2
18	PROP 3" ELECTRICAL CONDUIT TYPE NM PLASTIC (UL) (TYP)	100
19	PROP POWER SOURCE PROP SERVICE CONNECTION W/INSTAR APPROVED HANDHOLE (POLYMER CONCRETE)	2
20	3' DYL W/9" GAPS (TYP)	100
21	PROP DETECTION ZONE (TYP)	2
22	PROP BICYCLE MARKINGS (TYP) (SEE DETAILS)	2
23	PROP ROADWAY MARKINGS (TYP) (SEE DETAILS)	2
24	PROP SPEED TABLE MARKINGS (TYP) (SEE DETAILS)	2
25	PROP 14' GALVANIZED STEEL POST W/RRFB (1-SIDED) W/TWO W11-1SP, W16-7p(L), W16-7p(R) & SP-1 W/INFRARED CAMERA DETECTOR STA 4+70.2, 23.0' LT SEE NOTE 6	2
26	PROP 3" ELECTRICAL CONDUIT TYPE NM PLASTIC (UL) (TYP)	100
27	PROP POWER SOURCE PROP SERVICE CONNECTION W/INSTAR APPROVED HANDHOLE (POLYMER CONCRETE)	2
28	3' DYL W/9" GAPS (TYP)	100
29	PROP DETECTION ZONE (TYP)	2
30	PROP BICYCLE MARKINGS (TYP) (SEE DETAILS)	2
31	PROP ROADWAY MARKINGS (TYP) (SEE DETAILS)	2
32	PROP SPEED TABLE MARKINGS (TYP) (SEE DETAILS)	2
33	PROP 14' GALVANIZED STEEL POST W/RRFB (1-SIDED) W/TWO W11-1SP, W16-7p(L), W16-7p(R) & SP-1 W/INFRARED CAMERA DETECTOR STA 4+70.2, 23.0' LT SEE NOTE 6	2
34	PROP 3" ELECTRICAL CONDUIT TYPE NM PLASTIC (UL) (TYP)	100
35	PROP POWER SOURCE PROP SERVICE CONNECTION W/INSTAR APPROVED HANDHOLE (POLYMER CONCRETE)	2
36	3' DYL W/9" GAPS (TYP)	100
37	PROP DETECTION ZONE (TYP)	2
38	PROP BICYCLE MARKINGS (TYP) (SEE DETAILS)	2
39	PROP ROADWAY MARKINGS (TYP) (SEE DETAILS)	2
40	PROP SPEED TABLE MARKINGS (TYP) (SEE DETAILS)	2
41	PROP 14' GALVANIZED STEEL POST W/RRFB (1-SIDED) W/TWO W11-1SP, W16-7p(L), W16-7p(R) & SP-1 W/INFRARED CAMERA DETECTOR STA 4+70.2, 23.0' LT SEE NOTE 6	2
42	PROP 3" ELECTRICAL CONDUIT TYPE NM PLASTIC (UL) (TYP)	100
43	PROP POWER SOURCE PROP SERVICE CONNECTION W/INSTAR APPROVED HANDHOLE (POLYMER CONCRETE)	2
44	3' DYL W/9" GAPS (TYP)	100
45	PROP DETECTION ZONE (TYP)	2
46	PROP BICYCLE MARKINGS (TYP) (SEE DETAILS)	2
47	PROP ROADWAY MARKINGS (TYP) (SEE DETAILS)	2
48	PROP SPEED TABLE MARKINGS (TYP) (SEE DETAILS)	2
49	PROP 14' GALVANIZED STEEL POST W/RRFB (1-SIDED) W/TWO W11-1SP, W16-7p(L), W16-7p(R) & SP-1 W/INFRARED CAMERA DETECTOR STA 4+70.2, 23.0' LT SEE NOTE 6	2
50	PROP 3" ELECTRICAL CONDUIT TYPE NM PLASTIC (UL) (TYP)	100
51	PROP POWER SOURCE PROP SERVICE CONNECTION W/INSTAR APPROVED HANDHOLE (POLYMER CONCRETE)	2
52	3' DYL W/9" GAPS (TYP)	100
53	PROP DETECTION ZONE (TYP)	2
54	PROP BICYCLE MARKINGS (TYP) (SEE DETAILS)	2
55	PROP ROADWAY MARKINGS (TYP) (SEE DETAILS)	2
56	PROP SPEED TABLE MARKINGS (TYP) (SEE DETAILS)	2
57	PROP 14' GALVANIZED STEEL POST W/RRFB (1-SIDED) W/TWO W11-1SP, W16-7p(L), W16-7p(R) & SP-1 W/INFRARED CAMERA DETECTOR STA 4+70.2, 23.0' LT SEE NOTE 6	2
58	PROP 3" ELECTRICAL CONDUIT TYPE NM PLASTIC (UL) (TYP)	100
59	PROP POWER SOURCE PROP SERVICE CONNECTION W/INSTAR APPROVED HANDHOLE (POLYMER CONCRETE)	2
60	3' DYL W/9" GAPS (TYP)	100
61	PROP DETECTION ZONE (TYP)	2
62	PROP BICYCLE MARKINGS (TYP) (SEE DETAILS)	2
63	PROP ROADWAY MARKINGS (TYP) (SEE DETAILS)	2
64	PROP SPEED TABLE MARKINGS (TYP) (SEE DETAILS)	2
65	PROP 14' GALVANIZED STEEL POST W/RRFB (1-SIDED) W/TWO W11-1SP, W16-7p(L), W16-7p(R) & SP-1 W/INFRARED CAMERA DETECTOR STA 4+70.2, 23.0' LT SEE NOTE 6	2
66	PROP 3" ELECTRICAL CONDUIT TYPE NM PLASTIC (UL) (TYP)	100
67	PROP POWER SOURCE PROP SERVICE CONNECTION W/INSTAR APPROVED HANDHOLE (POLYMER CONCRETE)	2
68	3' DYL W/9" GAPS (TYP)	100
69	PROP DETECTION ZONE (TYP)	2
70	PROP BICYCLE MARKINGS (TYP) (SEE DETAILS)	2
71	PROP ROADWAY MARKINGS (TYP) (SEE DETAILS)	2
72	PROP SPEED TABLE MARKINGS (TYP) (SEE DETAILS)	2
73	PROP 14' GALVANIZED STEEL POST W/RRFB (1-SIDED) W/TWO W11-1SP, W16-7p(L), W16-7p(R) & SP-1 W/INFRARED CAMERA DETECTOR STA 4+70.2, 23.0' LT SEE NOTE 6	2
74	PROP 3" ELECTRICAL CONDUIT TYPE NM PLASTIC (UL) (TYP)	100
75	PROP POWER SOURCE PROP SERVICE CONNECTION W/INSTAR APPROVED HANDHOLE (POLYMER CONCRETE)	2
76	3' DYL W/9" GAPS (TYP)	100
77	PROP DETECTION ZONE (TYP)	2
78	PROP BICYCLE MARKINGS (TYP) (SEE DETAILS)	2
79	PROP ROADWAY MARKINGS (TYP) (SEE DETAILS)	2
80	PROP SPEED TABLE MARKINGS (TYP) (SEE DETAILS)	2
81	PROP 14' GALVANIZED STEEL POST W/RRFB (1-SIDED) W/TWO W11-1SP, W16-7p(L), W16-7p(R) & SP-1 W/INFRARED CAMERA DETECTOR STA 4+70.2, 23.0' LT SEE NOTE 6	2
82	PROP 3" ELECTRICAL CONDUIT TYPE NM PLASTIC (UL) (TYP)	100
83	PROP POWER SOURCE PROP SERVICE CONNECTION W/INSTAR APPROVED HANDHOLE (POLYMER CONCRETE)	2
84	3' DYL W/9" GAPS (TYP)	100
85	PROP DETECTION ZONE (TYP)	2
86	PROP BICYCLE MARKINGS (TYP) (SEE DETAILS)	2
87	PROP ROADWAY MARKINGS (TYP) (SEE DETAILS)	2
88	PROP SPEED TABLE MARKINGS (TYP) (SEE DETAILS)	2
89	PROP 14' GALVANIZED STEEL POST W/RRFB (1-SIDED) W/TWO W11-1SP, W16-7p(L), W16-7p(R) & SP-1 W/INFRARED CAMERA DETECTOR STA 4+70.2, 23.0' LT SEE NOTE 6	2
90	PROP 3" ELECTRICAL CONDUIT TYPE NM PLASTIC (UL) (TYP)	100
91	PROP POWER SOURCE PROP SERVICE CONNECTION W/INSTAR APPROVED HANDHOLE (POLYMER CONCRETE)	2
92	3' DYL W/9" GAPS (TYP)	100
93	PROP DETECTION ZONE (TYP)	2
94	PROP BICYCLE MARKINGS (TYP) (SEE DETAILS)	2
95	PROP ROADWAY MARKINGS (TYP) (SEE DETAILS)	2
96	PROP SPEED TABLE MARKINGS (TYP) (SEE DETAILS)	2
97	PROP 14' GALVANIZED STEEL POST W/RRFB (1-SIDED) W/TWO W11-1SP, W16-7p(L), W16-7p(R) & SP-1 W/INFRARED CAMERA DETECTOR STA 4+70.2, 23.0' LT SEE NOTE 6	2
98	PROP 3" ELECTRICAL CONDUIT TYPE NM PLASTIC (UL) (TYP)	100
99	PROP POWER SOURCE PROP SERVICE CONNECTION W/INSTAR APPROVED HANDHOLE (POLYMER CONCRETE)	2
100	3' DYL W/9" GAPS (TYP)	100

RAILROAD SIDE LINE

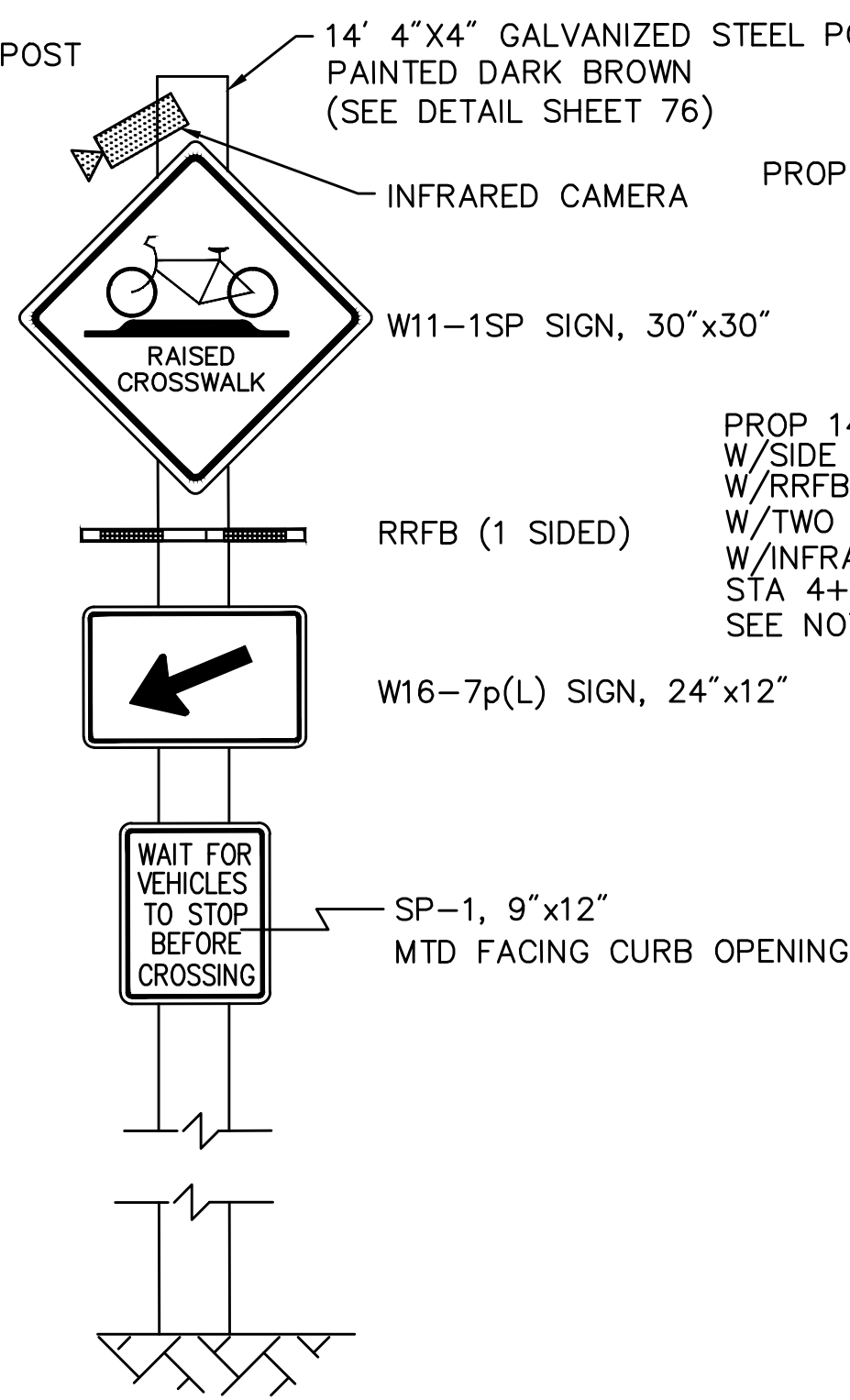
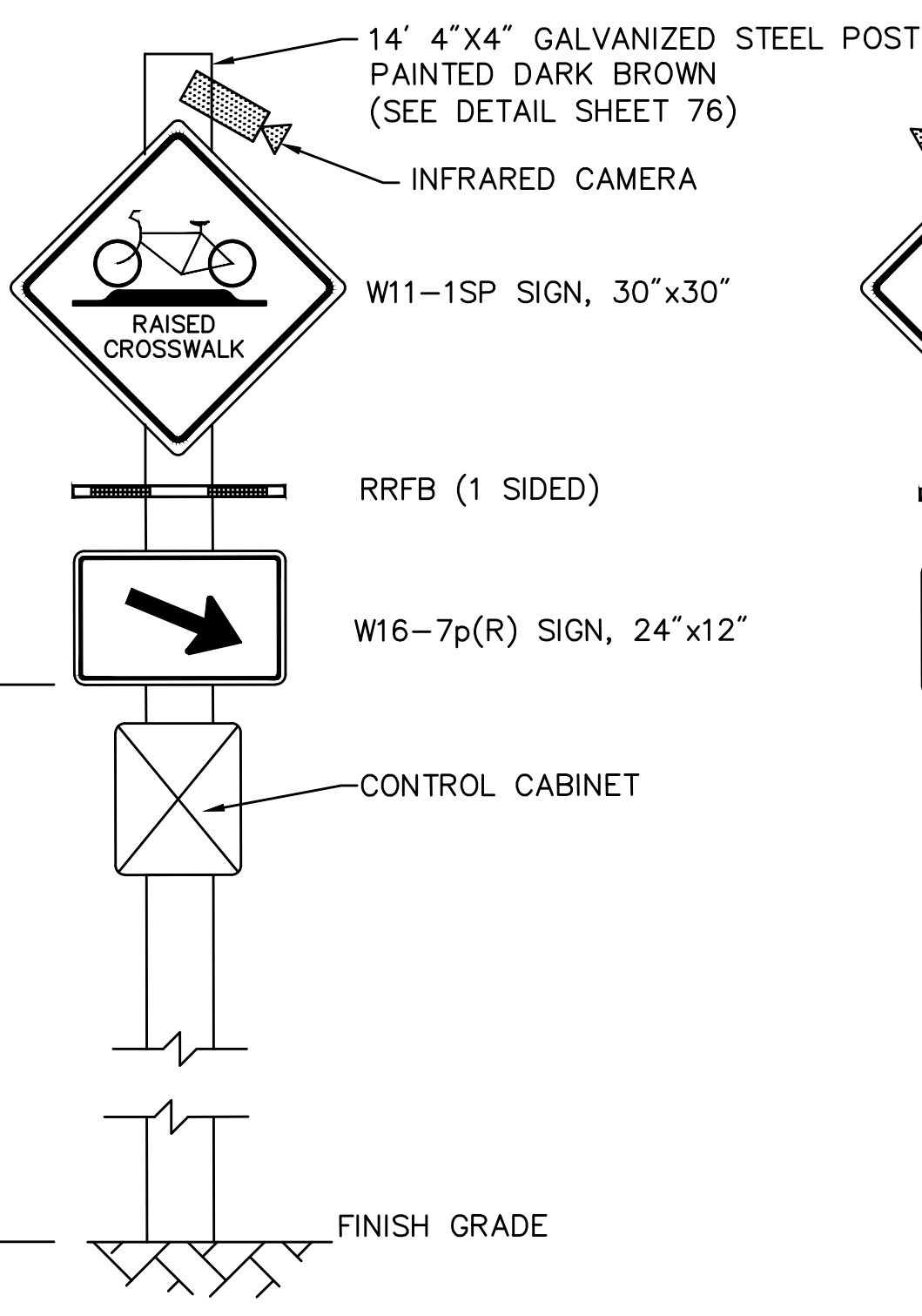
RAILROAD SIDE LINE

CAPE COD RAIL TRAIL

RAILROAD SIDE LINE

RAILROAD SIDE LINE

CAPE COD RAIL TRAIL



RECTANGULAR RAPID FLASHING BEACON DETAIL  
NOT TO SCALE

PROP 14' GALVANIZED STEEL POST  
W/SIDE OF POST MOUNTED CONTROL CABINET  
W/RRFB (1-SIDED)  
W/TWO W11-1SP, W16-7p(L), W16-7p(R) & SP-1  
W/INFRARED CAMERA DETECTOR  
STA 4+99.7, 22.4' RT  
SEE NOTE 6

LIMIT  
TA

MEET EXIST MARKINGS

LIMIT  
TA

W11-1SP  
W16-9p

TOWN LAYOUT

TOWN LAYOUT

DUPONT AVENUE

R7-1D

R7-1D

PROP POWER SOURCE  
PROP SERVICE CONNECTION  
W/INSTAR APPROVED HANDHOLE  
(POLYMER CONCRETE)

3' DYL  
W/9" GAPS (TYP)

PROP 3" ELECTRICAL  
CONDUIT TYPE NM  
PLASTIC (UL) (TYP)

D11-1  
SP-2  
M6-4

PROP 14' GALVANIZED STEEL POST  
W/RRFB (1-SIDED)  
W/TWO W11-1SP, W16-7p(L), W16-7p(R) & SP-1  
W/INFRARED CAMERA DETECTOR  
STA 4+70.2, 23.0' LT  
SEE NOTE 6

3' DYL  
W/9" GAPS (TYP)

R5-3

R1-1a  
D3-1

R4-7a

PROP ROADWAY MARKINGS (TYP)  
(SEE DETAILS)

R5-3

R4-7a

R1-1a  
D3-1

R4-7

D11-1  
SP-2  
M6-4

PROP SPEED TABLE MARKINGS (TYP)  
(SEE DETAILS)

R7-1D

R7-1D

MEET EXIST MARKINGS

W11-1SP  
W16-9p

CONSTRUCTION NOTES:

1. PULL BOXES SHALL BE ADJACENT TO CURB UNLESS OTHERWISE NOTED AND SHALL NOT BE LOCATED IN WHEELCHAIR RAMPS.
2. ALL PAVEMENT MARKINGS ON ROADWAYS SHALL BE REFLECTIVE THERMOPLASTIC. ALL PAVEMENT MARKINGS ON THE CAPE COD RAIL TRAIL SHALL BE REFLECTIVE PAINT.
3. WHERE EXISTING PAVEMENT MARKINGS ARE DIFFERENT THAN PROPOSED MARKINGS SHOWN, REMOVE BY AN APPROVED METHOD.
4. TRAFFIC SIGNAL FOUNDATIONS TO BE LOCATED BY STATION AND OFFSET.
5. RETAIN ALL EXISTING SIGNS UNLESS OTHERWISE NOTED.
6. UPON ACTUATION, THE RRFB SHALL INITIALLY BE SET TO FLASH FOR 10 SECONDS.

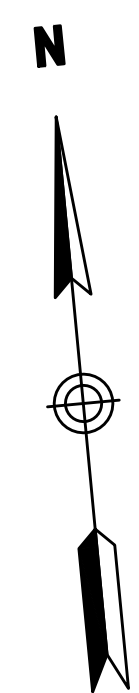


YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	ED AID	FEET	TOTAL
MA	MTA		
E T I L E			

TRAFFIC SIGNAL SIGNS & PAVEMENT MARKINGS





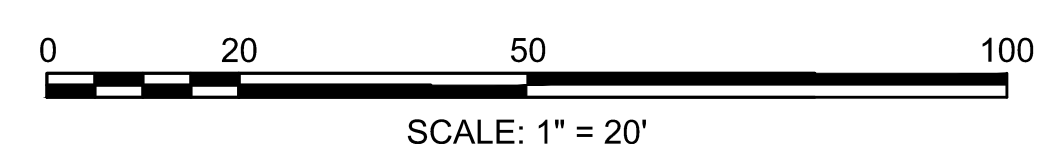
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 B T E M

- CONSTRUCTION NOTES:**
1. PULL BOXES SHALL BE ADJACENT TO CURB UNLESS OTHERWISE NOTED AND SHALL NOT BE LOCATED IN WHEELCHAIR RAMPS.
  2. ALL PAVEMENT MARKINGS ON ROADWAYS SHALL BE REFLECTIVE THERMOPLASTIC. ALL PAVEMENT MARKINGS ON THE CAPE COD RAIL TRAIL SHALL BE REFLECTIVE PAINT.
  3. WHERE EXISTING PAVEMENT MARKINGS ARE DIFFERENT THAN PROPOSED MARKINGS SHOWN, REMOVE BY AN APPROVED METHOD.
  4. TRAFFIC SIGNAL FOUNDATIONS TO BE LOCATED BY STATION AND OFFSET.
  5. RETAIN ALL EXISTING SIGNS UNLESS OTHERWISE NOTED.
  6. UPON ACTUATION, THE RRFB SHALL INITIALLY BE SET TO FLASH FOR 10 SECONDS.

BACK VIEW FRONT VIEW (FACING ON-COMING TRAFFIC)

RECTANGULAR RAPID FLASHING BEACON DETAIL

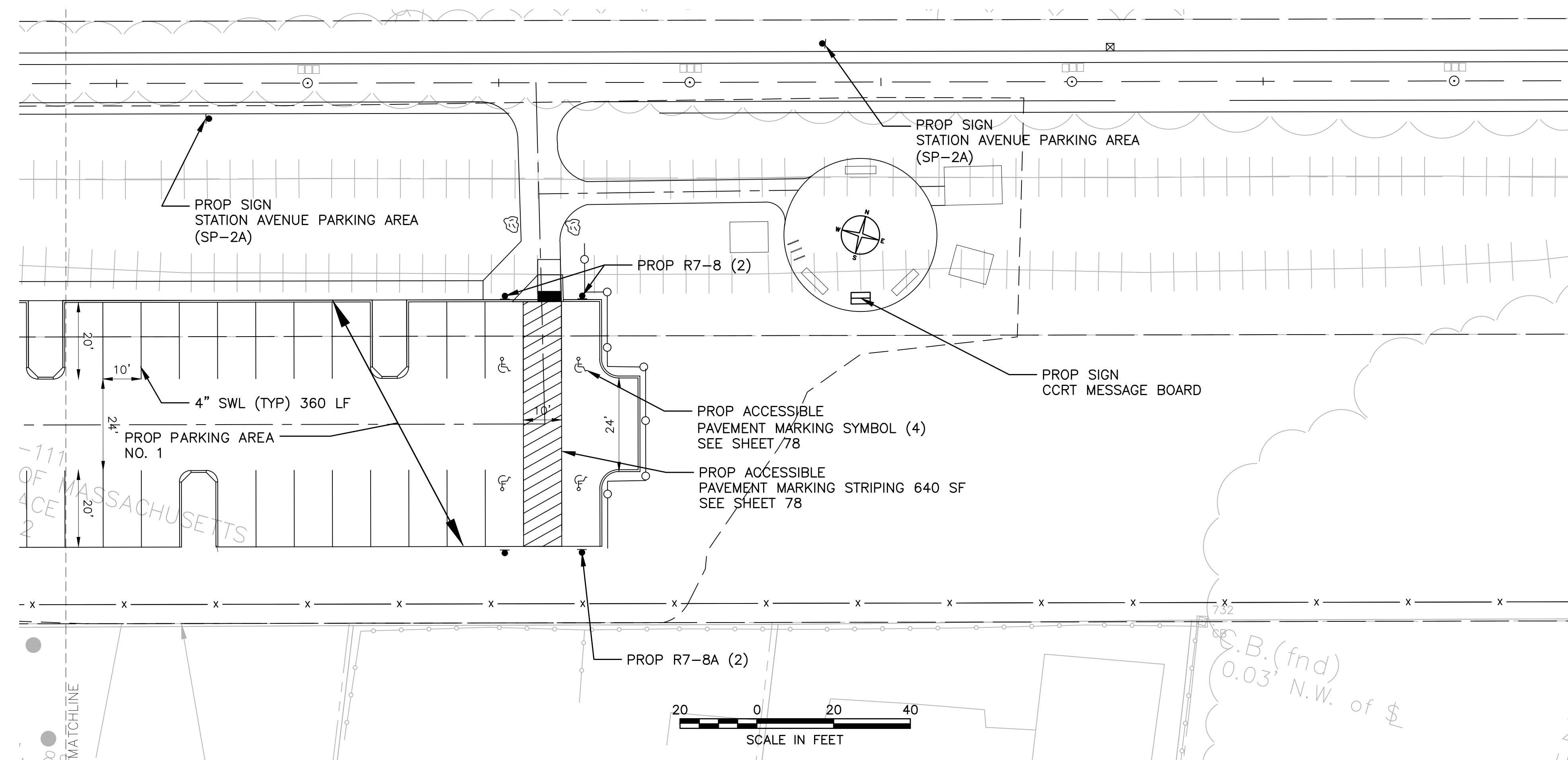
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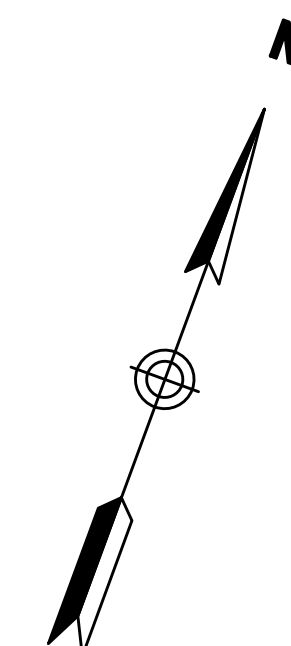
DATE	ED/AID	EET	TOTAL EET
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E/TILE			

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STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/PI-002S(758)X	46	185
PROJECT FILE NO. 604488			

[illegible]

T E X T T I M E M M A T I O N												
ID E T I L A T T R I B U T E M B E	C O L O R I N D I C A T O R		T E X T	T E X T T I M E		M B E E L E M E N T	C O L O R			C O L O R A D M B E E L E M E N T	T A A E A E E T	A E A E E T
	I D T	E N D T		L E T T E R E L E M E N T	E L E M E N T A T T R I B U T E		B A C K G R O U N D	L E T T E R	B O U N D			
000A	01*	01*		<div><div>M T D</div><div>TA DA D</div></div>	0	<div><div>M T D</div><div>TA DA D</div></div>				0000T 000E D	000	000
0000	01*	01*			0					0000T 000E D	000	000
000A	00*	00*	COST STREET AVENUE PARKING AREA TOWN OF YAROWATH	<div><div>A</div><div>0 E E I E D</div></div>	<div><div>A</div><div>0 E E I E D</div></div>	0	FA E	BLA	0	0	000	000
000A	00*	00*	STATION AVENUE PARKING AREA	<div><div>A</div><div>0 E E I E D</div></div>	<div><div>A</div><div>0 E E I E D</div></div>	0	FA E	BLA	0	0	000	000

[illegible]



STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/11-002S(758)X	47	185

PROJECT FILE NO. 604488

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/11-002S(758)X	47	185

PROJECT FILE NO. 604488

00TE00

00ALLA000000E00LAT000A0D00TEMA00E000CALLBE00AB0ATED0IT00000TE00T0E00A00LATED0  
LE000E0LE0TIE0EETI00E0E0ETI0M0000T0E000000

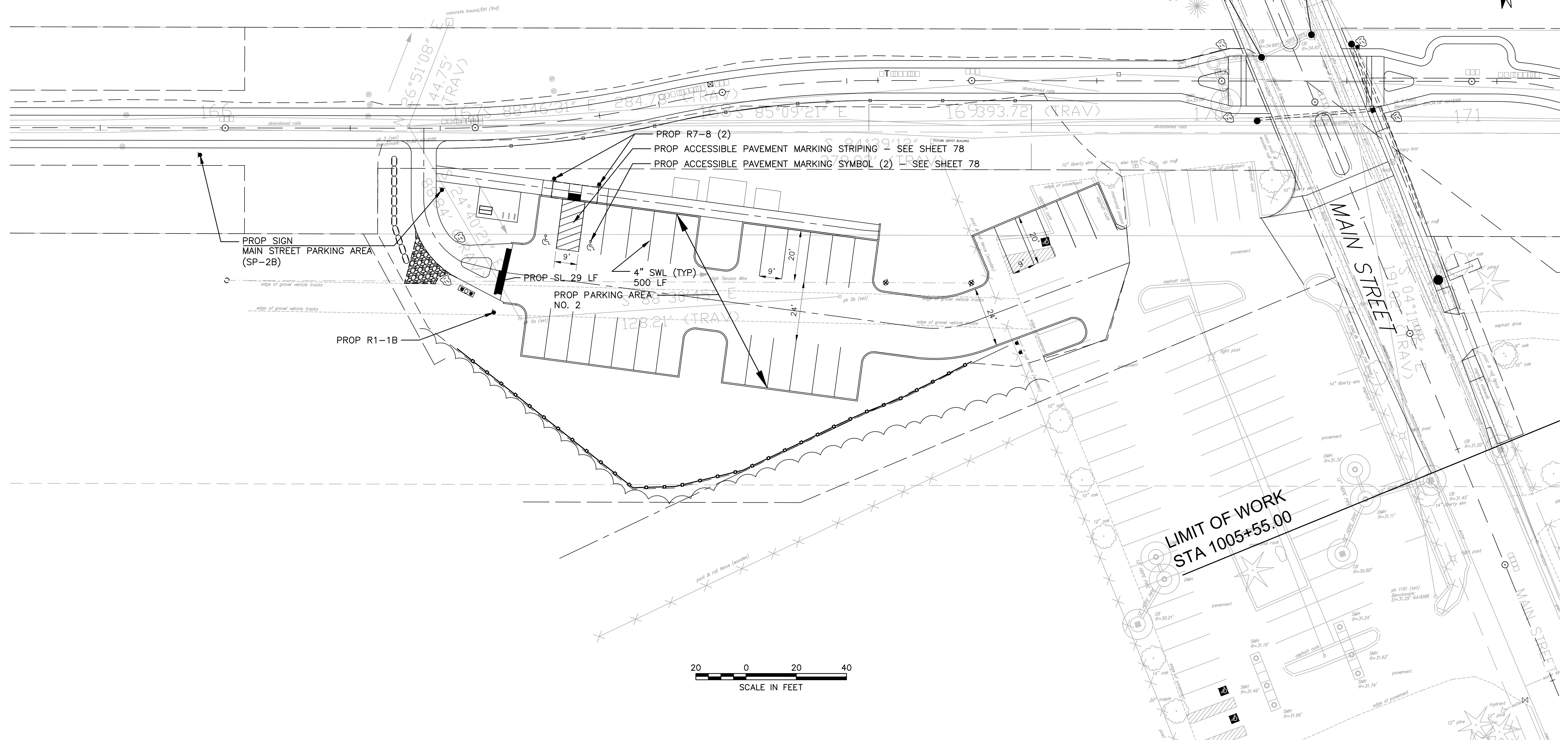
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00ALL00000T000ALLBEBE0A0A0TELE00000E0TA00LATA00E00T00A0D00LE0DE0T0A000

00ALL000L0ATI000E00E0ET000ALLBEMACED0E0T00FIELDB0T0E000T0A0T0A0D0E0IE0ED  
B0T0E0E00E0E000T0D0T0A00E0000T00TALLATI00

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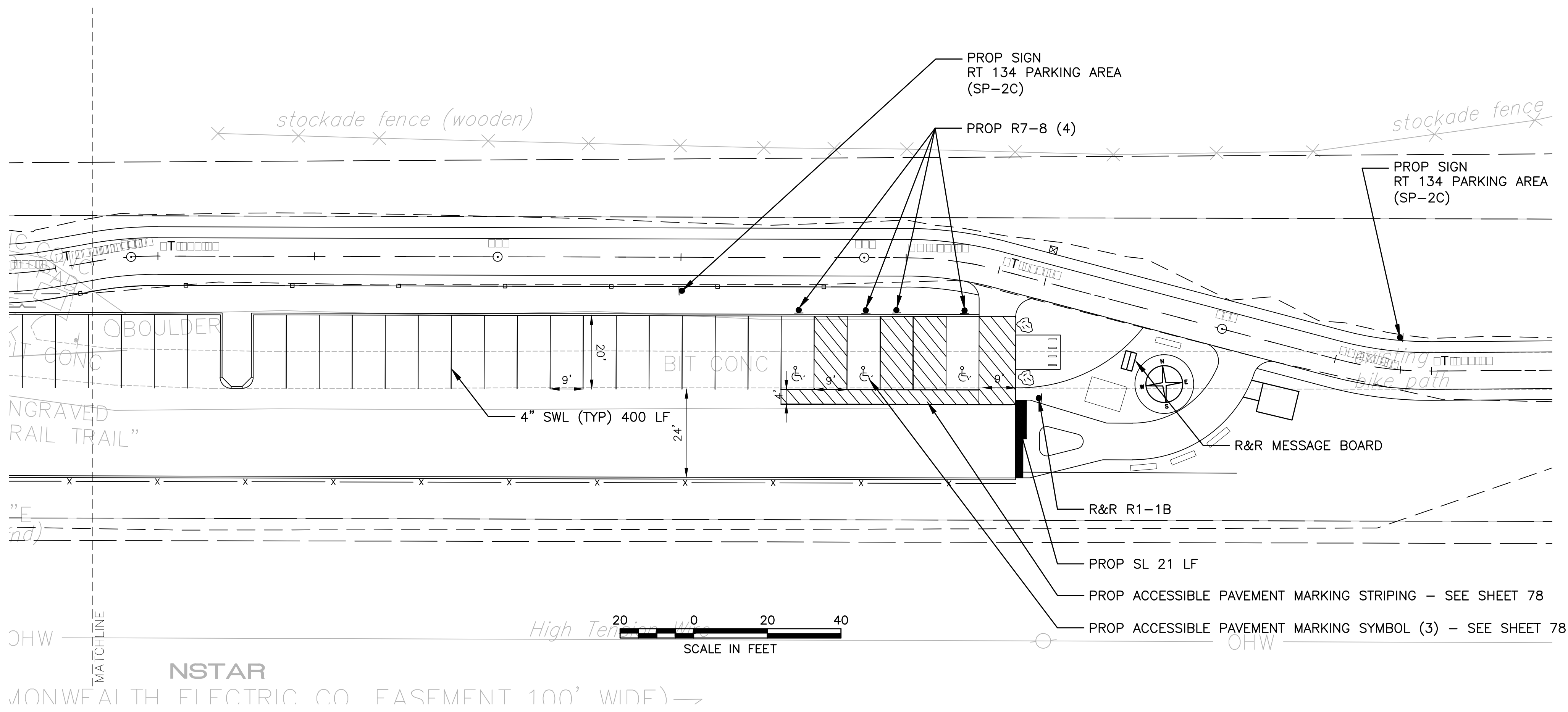
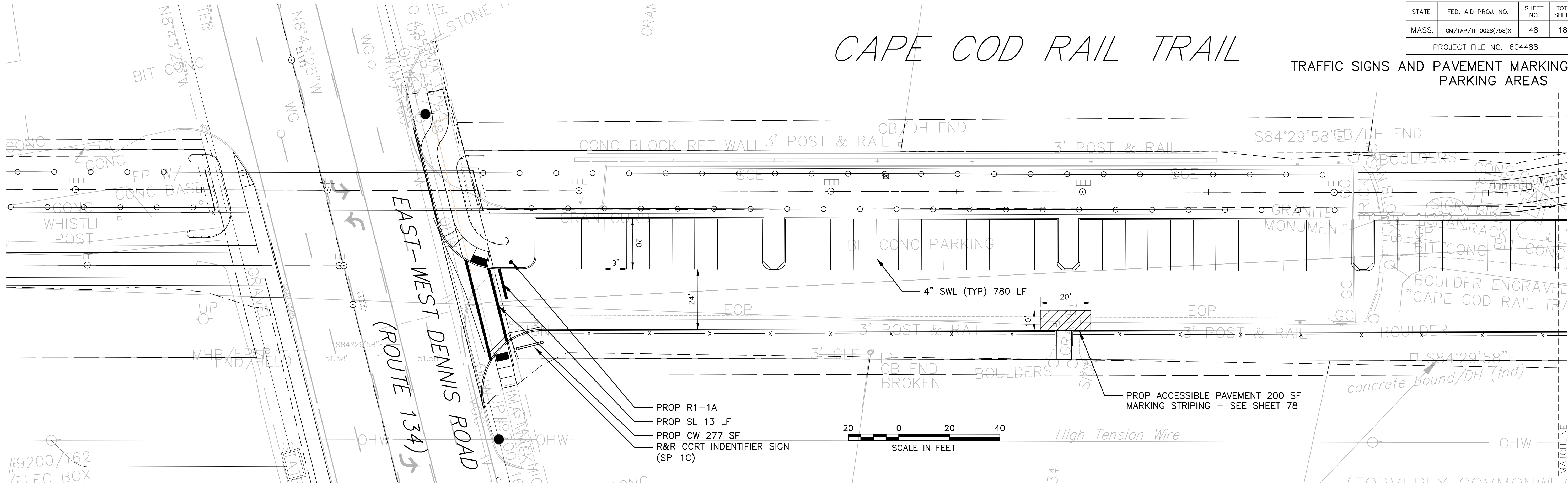


YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/TI-002S(758)X	48	185
PROJECT FILE NO. 604488			

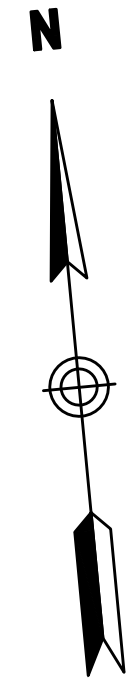
TRAFFIC SIGNS AND PAVEMENT MARKINGS –  
PARKING AREAS

CAPE COD RAIL TRAIL



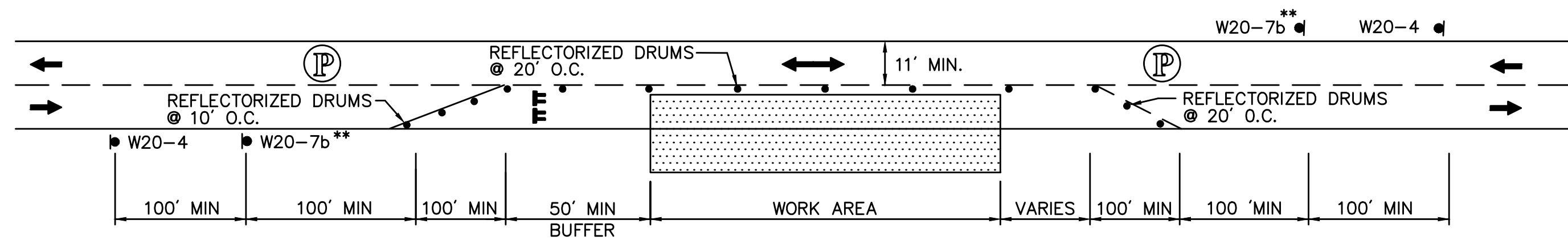
IDENTIFICATION NUMBER	DESCRIPTION		TEXT	TEXT DIMENSIONS		NUMBER OF SIGNS	COLOR		MATERIAL	POST AREA	AREA
	QTY	REMARKS		LETTER HEIGHT	TEXT WIDTH		BACK	LETTER			
001A	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001B	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001C	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001D	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001E	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001F	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001G	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001H	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001I	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001J	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001K	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001L	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001M	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001N	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001O	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001P	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001Q	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001R	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001S	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001T	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001U	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001V	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001W	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001X	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001Y	1		STOP	6"	12"	1			ALUMINUM	10"	10"
001Z	1		STOP	6"	12"	1			ALUMINUM	10"	10"

NOTE:  
ALL SIGNS SHALL BE FABRICATED FROM ALUMINUM OR GALVANIZED STEEL.  
ALL SIGNS SHALL BE PAINTED OR ENGRAVED.  
ALL SIGNS SHALL BE MAINTAINED IN GOOD CONDITION.  
ALL SIGNS SHALL BE REPAIRED OR REPLACED AS NEEDED.  
ALL SIGNS SHALL BE MAINTAINED IN GOOD CONDITION.  
ALL SIGNS SHALL BE REPAIRED OR REPLACED AS NEEDED.  
ALL SIGNS SHALL BE MAINTAINED IN GOOD CONDITION.  
ALL SIGNS SHALL BE REPAIRED OR REPLACED AS NEEDED.

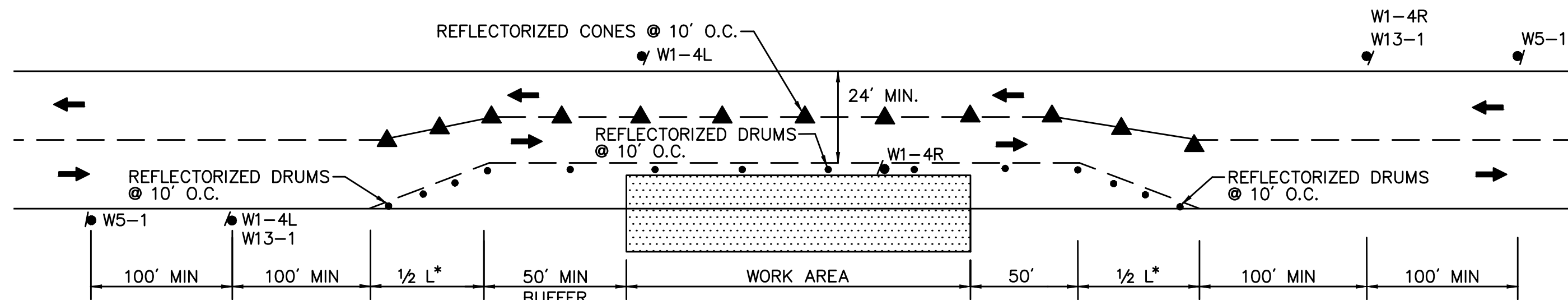




LANE CLOSURES SHOWN ARE FOR TEMPORARY CONSTRUCTION.  
ALL DRUMS AND SIGNS ARE SHOWN AS THEY SHOULD APPEAR  
DURING THE WORKING DAY, OR WHILE OPERATING IN THE WORK ZONE.



TYPICAL TWO WAY STREET LANE CLOSURE  
NOT TO SCALE



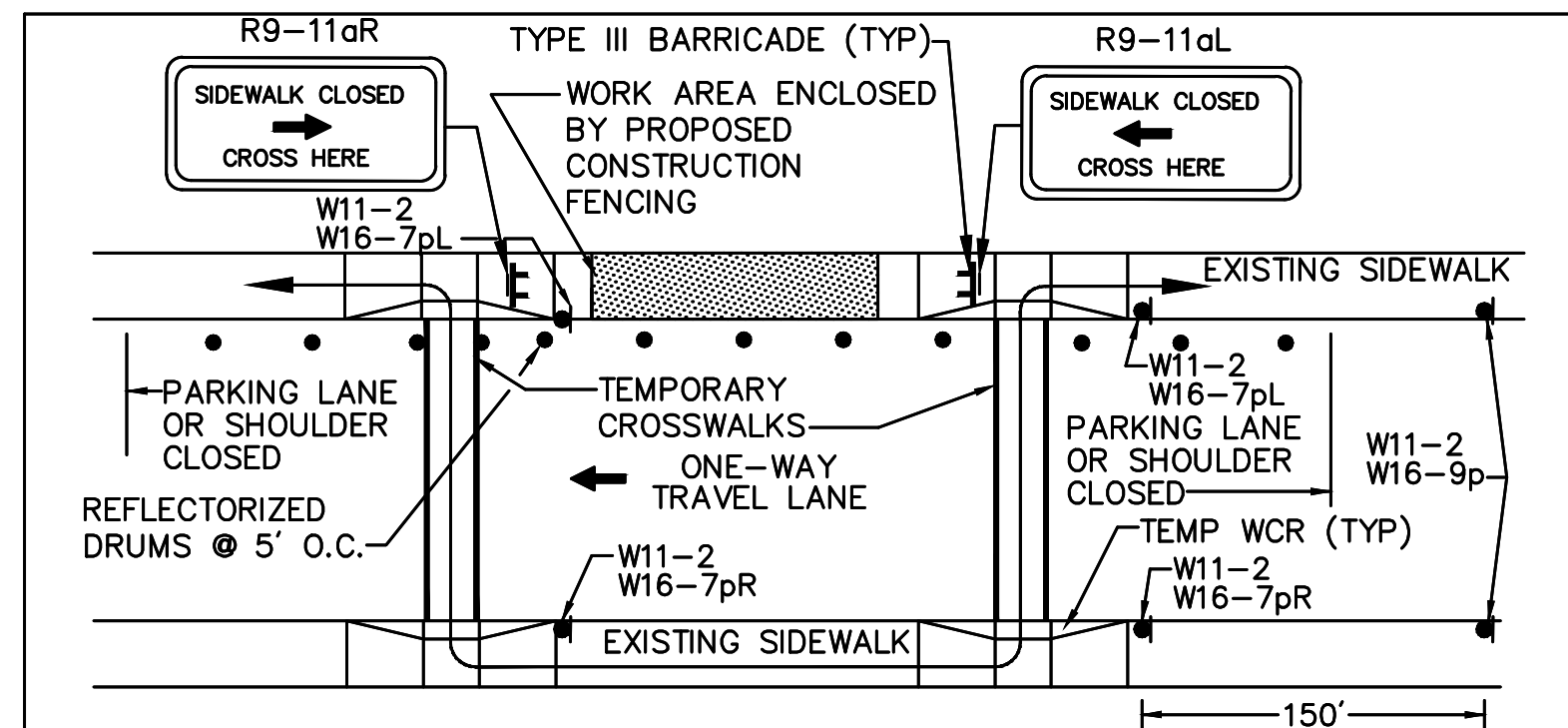
TYPICAL TWO WAY STREET LANE SHIFT  
NOT TO SCALE

FOR POSTED SPEEDS OF 40 MPH OR LESS

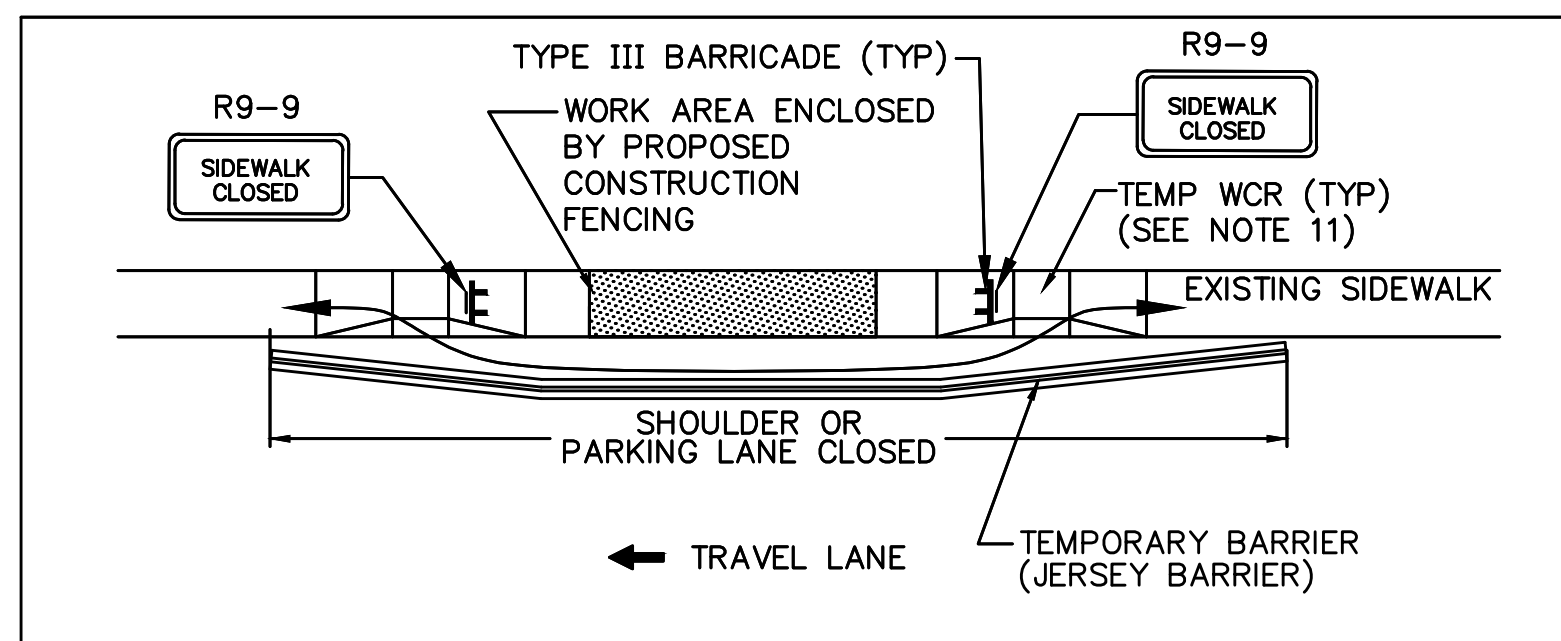
\*  $L = \frac{WS^2}{60}$  L=TAPER LENGTH  
S=POSTED SPEED LIMIT  
W=WIDTH OF ROADWAY TO BE SHIFTED OR REDIRECTED

### PEDESTRIAN BYPASS

TO BE USED IN CONJUNCTION WITH THE PROPOSED LANE CLOSURE DETAILS AND DURING  
CONSTRUCTION STAGING AND AS DIRECTED BY THE ENGINEER



TYPE II  
NTS



TYPE I  
NTS

#### NOTES:

1. ADDITIONAL ADVANCE WARNING SIGNS MAY BE NECESSARY AS DETERMINED BY THE ENGINEER.
2. CONTROLS FOR PEDESTRIAN TRAFFIC ONLY, ARE SHOWN. VEHICULAR TRAFFIC SHALL BE MAINTAINED AS SHOWN ELSEWHERE.
3. STREET LIGHTING SHOULD BE CONSIDERED WHEN LOCATING CONTROL DEVICES.
4. ——— INDICATES DIRECTION OF PEDESTRIAN TRAVEL.
5. IF THE WORK ZONE DOES NOT PERMIT PEDESTRIANS TO TRAVEL ADJACENT TO IT AS SHOWN IN PEDESTRIAN BYPASS TYPE I, TEMPORARY CROSSWALKS WITH APPROPRIATE SIGNS SHALL BE INSTALLED TO CROSS PEDESTRIANS TO THE OPPOSITE SIDE OF THE STREET AS SHOWN IN PEDESTRIAN BYPASS TYPE II, AND AS DIRECTED BY THE ENGINEER.
6. R9 SERIES SIGNS DEPICTED SHALL BE REVERSED FOR TRAVEL IN OPPOSITE DIRECTION OF THAT SHOWN
7. PROPOSED TEMPORARY CROSSWALKS SHALL BE 12" WIDE SURFACE APPLIED TAPE OR PAINT AS DIRECTED BY THE ENGINEER
8. CONTRACTOR SHALL MAINTAIN AS WIDE OF A PEDESTRIAN ACCESS AS POSSIBLE AT ALL TIMES. EXCEPT WHERE NECESSARY, THE CONTRACTOR MAY TEMPORARILY REDUCE PEDESTRIAN PATHWAYS TO 4 FEET IN WIDTH (EXCLUDING CURB) FOR NO MORE THAN 200 LINEAR FEET AT A TIME IN ACCORDANCE WITH ALL STANDARDS.
9. TEMPORARY WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH MASSDOT, MAAB, AND ADAAG REQUIREMENTS.
10. W16-7pR OR W16-7pL SIGNS SHALL BE USED IN COMBINATION WITH W11-2 SIGNS AS DIRECTED BY THE ENGINEER.

### TEMPORARY TRAFFIC CONTROL PLAN GENERAL NOTES

1. ALL CONSTRUCTION SIGNING, TEMPORARY TRAFFIC CONTROL DEVICES, AND ROADSIDE ELEMENTS SHALL CONFORM WITH THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS AMENDED, THE LATEST REVISIONS OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, (AASHTO) ROADSIDE DESIGN GUIDE, AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, AND NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP) REPORT 350 OR THE AASHTO MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
2. ALL DRUMS SHALL BE SET AT 20' ON CENTER MAX. ON LOCAL ROADWAY AND 50' ON CENTER MAX. UNLESS OTHERWISE NOTED OR ADJUSTED BY THE ENGINEER.
3. ALL DRUMS SHALL BE APPROXIMATELY PLACED AND MOVED AS NECESSARY TO MAINTAIN ADEQUATE ABUTTOR ACCESS AT ALL TIMES. WORK MAY REQUIRE ADDITIONAL SIGNS, DRUMS AND OTHER TRAFFIC CONTROL DEVICES, GRADING AND TEMPORARY PAVEMENT FOR PASSAGE OF PEDESTRIAN, VEHICULAR AND EMERGENCY TRAFFIC THROUGH THE WORK AREAS, BOTH DURING AND AFTER WORKING HOURS, TO MAINTAIN SUCH ACCESS.
4. THE CONTRACTOR SHALL NOTIFY EACH ABUTTOR AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS.
5. FOR RESTORATIVE WORK ON LOCAL ROADWAYS, A MINIMUM OF ONE 11' LANE OF TRAFFIC IN EACH DIRECTION ON TWO WAY STREETS SHALL BE MAINTAINED AT ALL TIMES, EXCEPT THAT DURING WORKING HOURS, TRAFFIC MAY BE REDUCED TO ONE LANE UNDER POLICE CONTROL FOR SHORT TIME PERIODS WHEN REQUIRED FOR THE WORK, AS SHOWN UNLESS OTHERWISE APPROVED BY THE ENGINEER.
6. GRADE SEPARATIONS IN EXCESS OF 2" DURING NON-WORKING HOURS WILL REQUIRE DELINEATION BY USE OF DRUMS.
7. EXCAVATION EDGES IN EXCESS OF 4 INCHES DEEP SHALL BE PROTECTED DURING NON-WORKING HOURS BY BACKFILLING WITH A WEDGE OF COMPACTED GRAVEL BORROW AT A 4:1 SLOPE PER THE DETAIL SHOWN. EXCAVATIONS IN EXCESS OF 2 FEET SHOULD BE PROTECTED BY A MASSDOT APPROVED TEMPORARY CONCRETE BARRIER WITH A MINIMUM LEVEL LATERAL OFFSET OF 3 FEET FROM THE EDGE OF EXCAVATION. BARRIER PLACED WITH LESS THAN THE RECOMMENDED LATERAL OFFSET TO THE EDGE OF EXCAVATION SHALL BE ANCHORED/RESTRAINED TO PREVENT LATERAL MOVEMENT WHEN STRUCK BY ERRANT VEHICLES TRAVELING AT THE POSTED SPEED.
8. 11' MINIMUM LANE WIDTHS SHALL BE MAINTAINED.
9. TRAFFIC CONTROL DEVICES AND SIGNS SHALL BE COVERED OR REMOVED DURING NON-WORKING HOURS WHEN NOT IN USE.
11. SIGNS INSTALLED ON PORTABLE STANDS REQUIRE 12 INCH MINIMUM MOUNTING HEIGHT FROM THE ROADWAY SURFACE TO THE BOTTOM OF THE SIGN.
12. SIGNS INSTALLED ON PORTABLE STANDS PLACED AMONG CHANNELIZATION DEVICES REQUIRE A 36 INCH MINIMUM MOUNTING HEIGHT FROM THE ROADWAY SURFACE TO THE BOTTOM OF THE SIGN.
13. SIGNS MOUNTED ON POSTS REQUIRE A MINIMUM 84 INCH MOUNTING HEIGHT FROM THE ROADWAY OR SIDEWALK SURFACE TO THE BOTTOM OF THE SIGN.
14. W20-7b SIGNS SHALL BE REPLACED BY W20-7a SIGNS WHEN FLAGGERS ARE USED IN LIEU OF POLICE OFFICER DETAILS.
15. LOCAL ROADWAYS MAY BE CLOSED AND DETOURED BEGINNING 6 PM ON FRIDAY ONLY UNLESS OTHERWISE APPROVED BY THE ENGINEER.
16. REFLECTORIZED CONES SHALL BE A MINIMUM OF 36 INCHES IN HEIGHT.
17. CONES MAY BE USED IN LIEU OF DRUMS OUTSIDE OF TAPER AREAS.
18. THERE IS NO DESIGNATED BICYCLE LANE ON THE ROADWAY WITHIN THE PROJECT LIMITS. BICYCLES ARE EXPECTED TO SHARE THE ROAD WITH GENERAL VEHICULAR TRAFFIC.

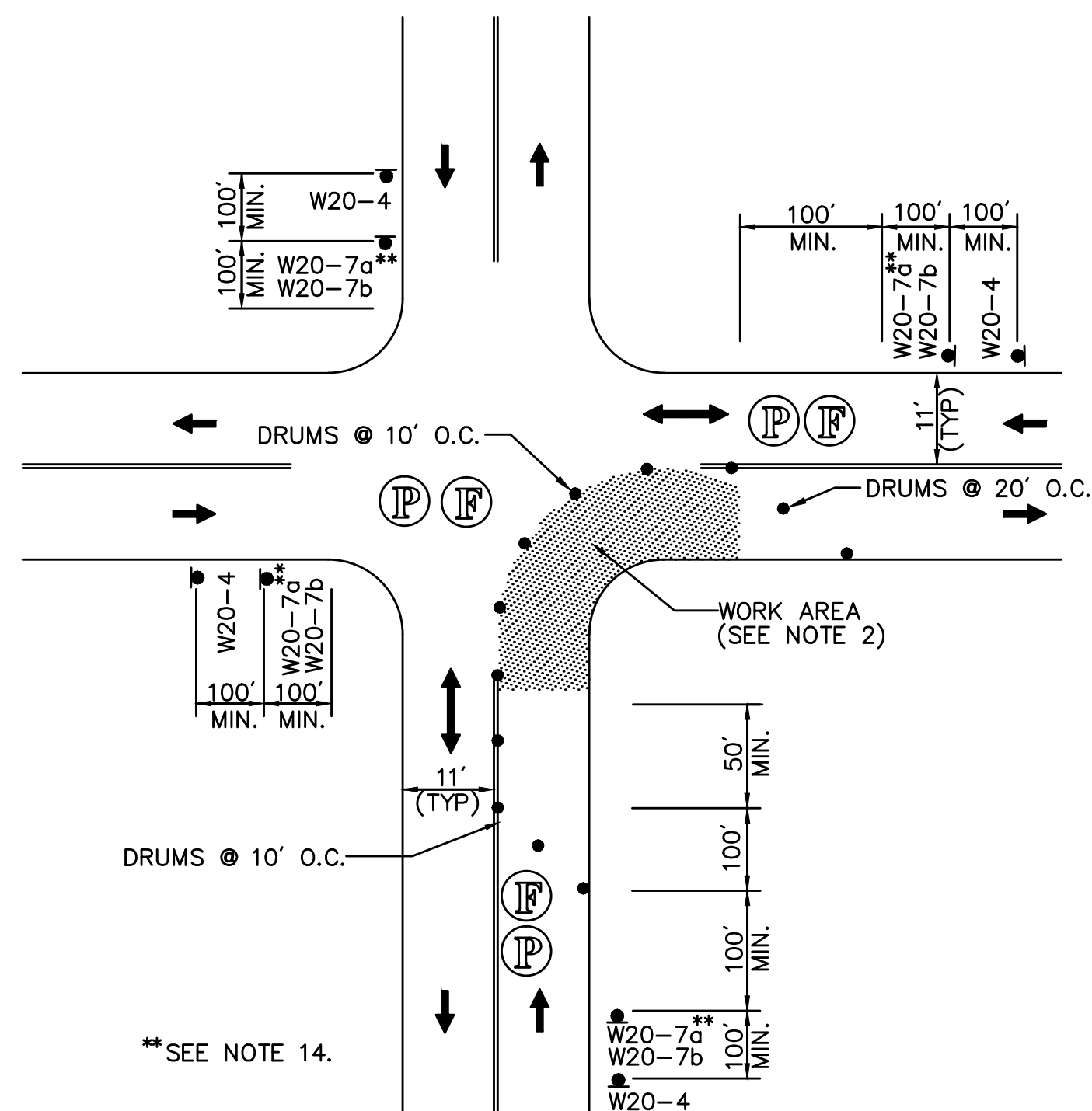
### YARMOUTH & DENNIS CAPE COD RAIL TRAIL EXTENSION

STATE	ED AID	FEET	TOTAL
MA	MTA		
E T A I L E			

### TEMPORARY TRAFFIC CONTROL PLANS

#### LEGEND

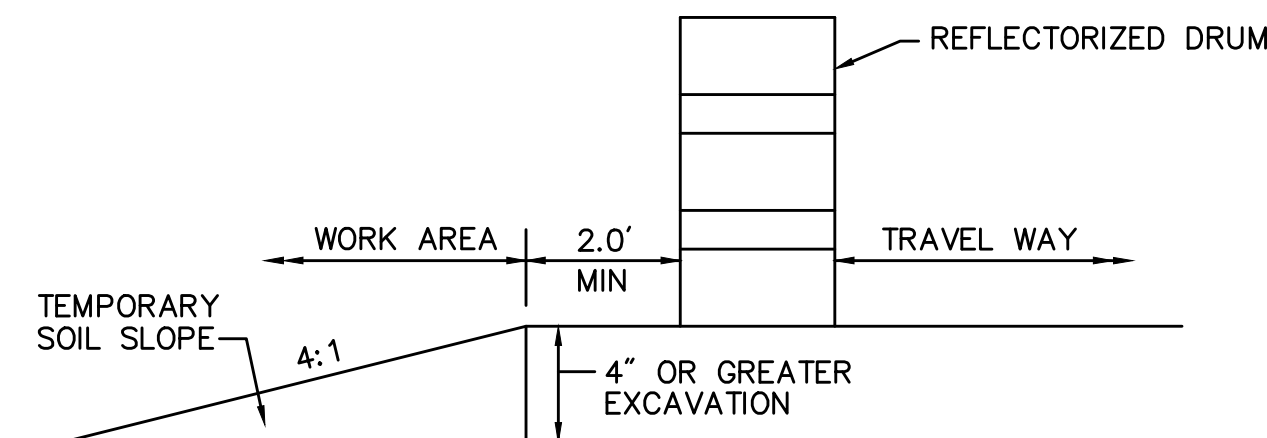
- TEMPORARY TRAFFIC CONTROL SIGN
- TYPE III BARRICADES
- WORK ZONE
- PROPOSED TRAFFIC FLOW
- SPECIAL LIGHTING UNIT (SLU)
- NOT TO SCALE
- REFLECTORIZED DRUM
- REFLECTORIZED CONE
- POLICE OFFICER



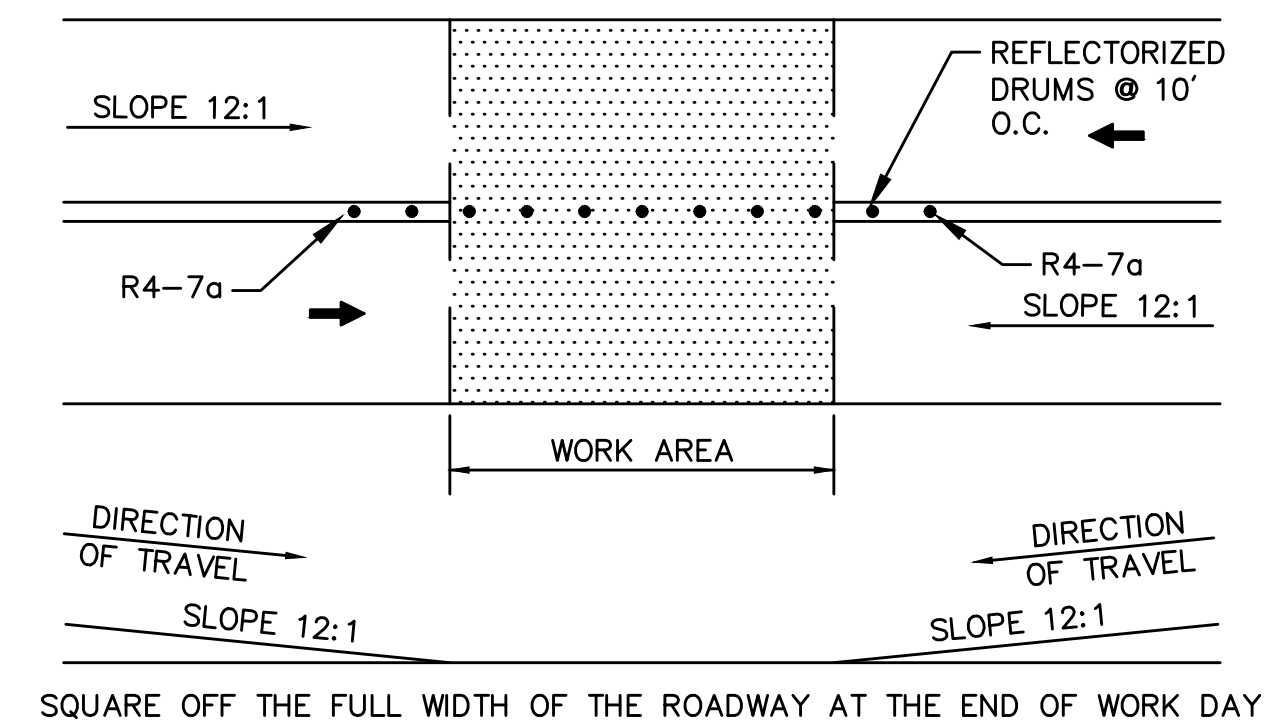
### ONE LANE BI-DIRECTIONAL TRAFFIC AT INTERSECTIONS

NOT TO SCALE

- NOTE:
1. ADVANCE WARNING SIGN PLACEMENT TO BE ADJUSTED AS NECESSARY
  2. ANY EXCAVATION GREATER THAN 3' DEEP ADJACENT TO TRAFFIC SHALL BE PROTECTED BY TEMPORARY CONCRETE BARRIER



ROADWAY SLOPE PROTECTION  
NOT TO SCALE

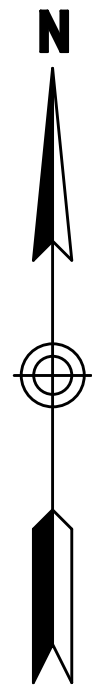


NOT TO SCALE

### TEMPORARY PAVEMENT TRANSITION DETAIL

NOTE: SEE SHEET 50 FOR TEMPORARY TRAFFIC CONTROL SIGNS





ADVANCE SIGN SCHEMATIC

NTS  
SIGNS TO BE INSTALLED AT THE PROJECT  
LIMITS AS SHOWN.  
ALL ADVANCE SIGNS TO BE IN PLACE FOR  
THE DURATION OF THE PROJECT.

YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

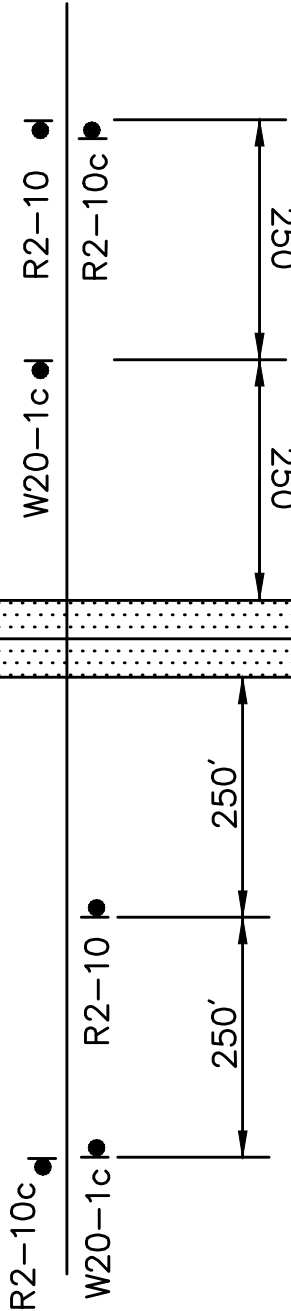
STATE	ED AID	SHEET	TOTAL
MA	MTA		
E:TITLE			

TEMPORARY TRAFFIC CONTROL PLANS

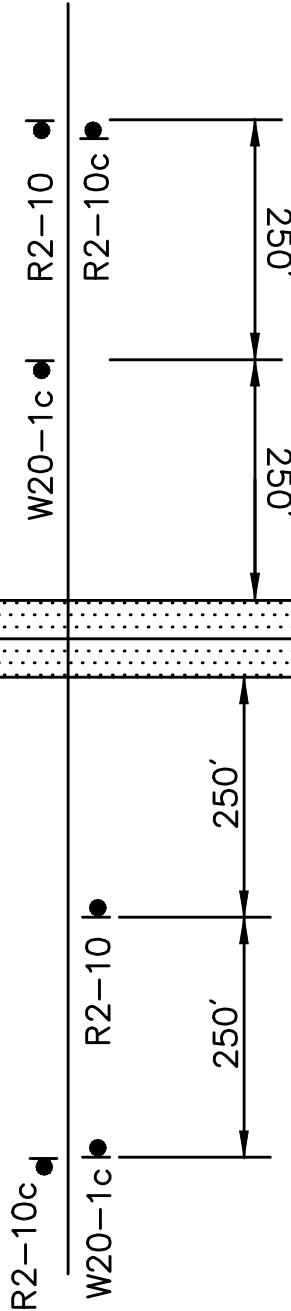
PETER HOMER PARK BIKEPATH

LIMIT OF  
WORK  
(TYP)

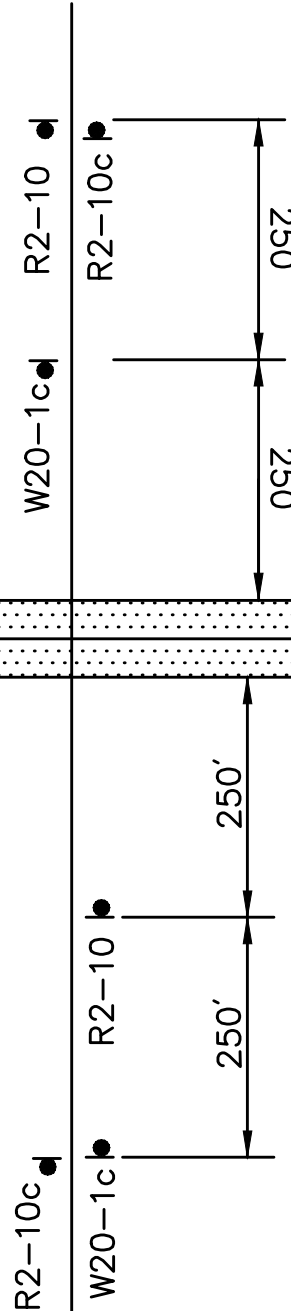
STATION AVENUE



DUPONT AVENUE

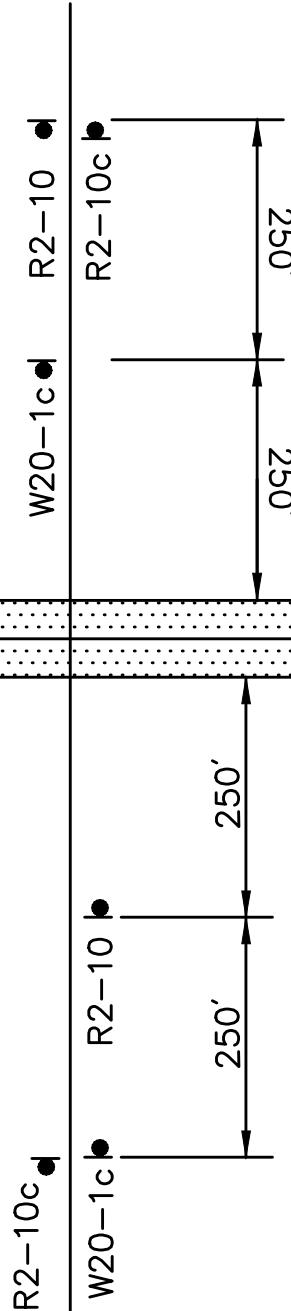


NORTH MAIN STREET

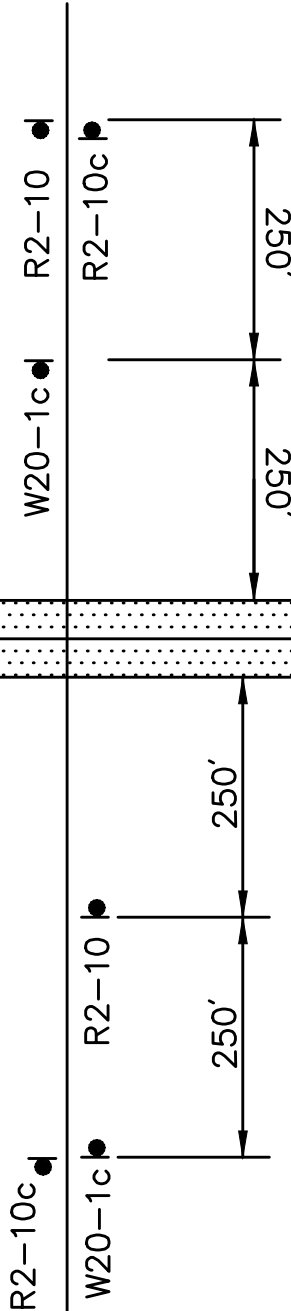


BASS RIVER

MAIN STREET



DENNIS ROAD (ROUTE 134)









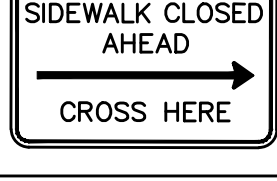


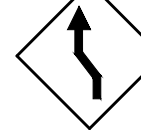






LIMIT OF  
WORK



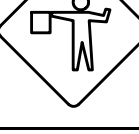

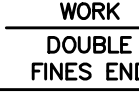






CAPE COD RAIL TRAIL




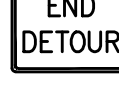










STATE	ED AID	SHEET	TOTAL
MA	MTA		
E T A L E			

TEMPORARY TRAFFIC CONTROL PLANS

TEMPORARY TRAFFIC CONTROL SIGNS

IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	COLOR		
	WIDTH	HEIGHT		BACK- GROUND	LEGEND	BORDER
R2-10a(2)	36"	48"		WHITE	BLACK	BLACK
R3-1	30"	30"		WHITE	RED/ BLACK	BLACK
R3-2	30"	30"		WHITE	RED/ BLACK	BLACK
R4-7a	24"	30"		WHITE	BLACK	BLACK
R9-9	18"	30"		WHITE	BLACK	BLACK
R9-11L	24"	48"		WHITE	BLACK	BLACK
R9-11R	24"	48"		WHITE	BLACK	BLACK
R11-2	48"	30"		WHITE	BLACK	BLACK
W1-4R	30"	30"		ORANGE	BLACK	BLACK
W1-4L	30"	30"		ORANGE	BLACK	BLACK
W5-1	36"	36"		ORANGE	BLACK	BLACK
W11-2	30"	30"		ORANGE	BLACK	BLACK
W13-1(20)	36"	48"		ORANGE	BLACK	BLACK
W16-7pR	12"	24"		ORANGE	BLACK	BLACK
W16-7pL	12"	24"		ORANGE	BLACK	BLACK
W16-9p	12"	24"		ORANGE	BLACK	BLACK

IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	COLOR		
	WIDTH	HEIGHT		BACK- GROUND	LEGEND	BORDER
W20-1c(1)	48"	48"		ORANGE	BLACK	BLACK
W20-4	36"	36"		ORANGE	BLACK	BLACK
W20-7a	36"	36"		ORANGE	BLACK	BLACK
W20-7b	36"	36"		ORANGE	BLACK	BLACK
R2-10e	36"	48"		ORANGE/ WHITE	BLACK	BLACK
M1-4(6)	24"	24"		WHITE	BLACK	BLACK
M1-5(6A)	24"	24"		WHITE	BLACK	BLACK
M1-5(134)	24"	24"		WHITE	BLACK	BLACK
M3-1	24"	12"		WHITE	BLACK	BLACK
M3-3	24"	12"		WHITE	BLACK	BLACK
M4-5	24"	12"		WHITE	BLACK	BLACK

IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	COLOR		
	WIDTH	HEIGHT		BACK- GROUND	LEGEND	BORDER
M4-9L	24"	30"		ORANGE	BLACK	BLACK
M4-9R	24"	30"		ORANGE	BLACK	BLACK
M4-9V	24"	30"		ORANGE	BLACK	BLACK
M4-8a	18"	24"		ORANGE	BLACK	BLACK
M4-8	12"	24"		ORANGE	BLACK	BLACK
M4-10R	18"	48"		ORANGE	BLACK	-
M4-10L	48"	12"		ORANGE	BLACK	-
M6-1L	30"	21"		ORANGE	BLACK	BLACK
M6-1R	30"	21"		ORANGE	BLACK	BLACK
M6-3	30"	21"		ORANGE	BLACK	BLACK
SUPP(A)	30"	12"		ORANGE	BLACK	BLACK
W20-1c	36"	36"		ORANGE	BLACK	BLACK
W20-2c	36"	36"		ORANGE	BLACK	BLACK
W20-3c	36"	36"		ORANGE	BLACK	BLACK



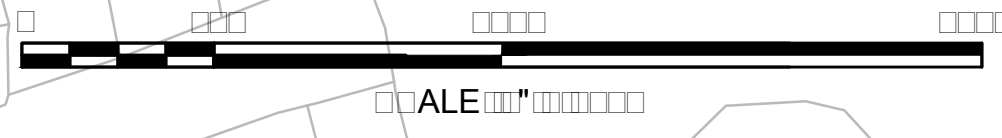
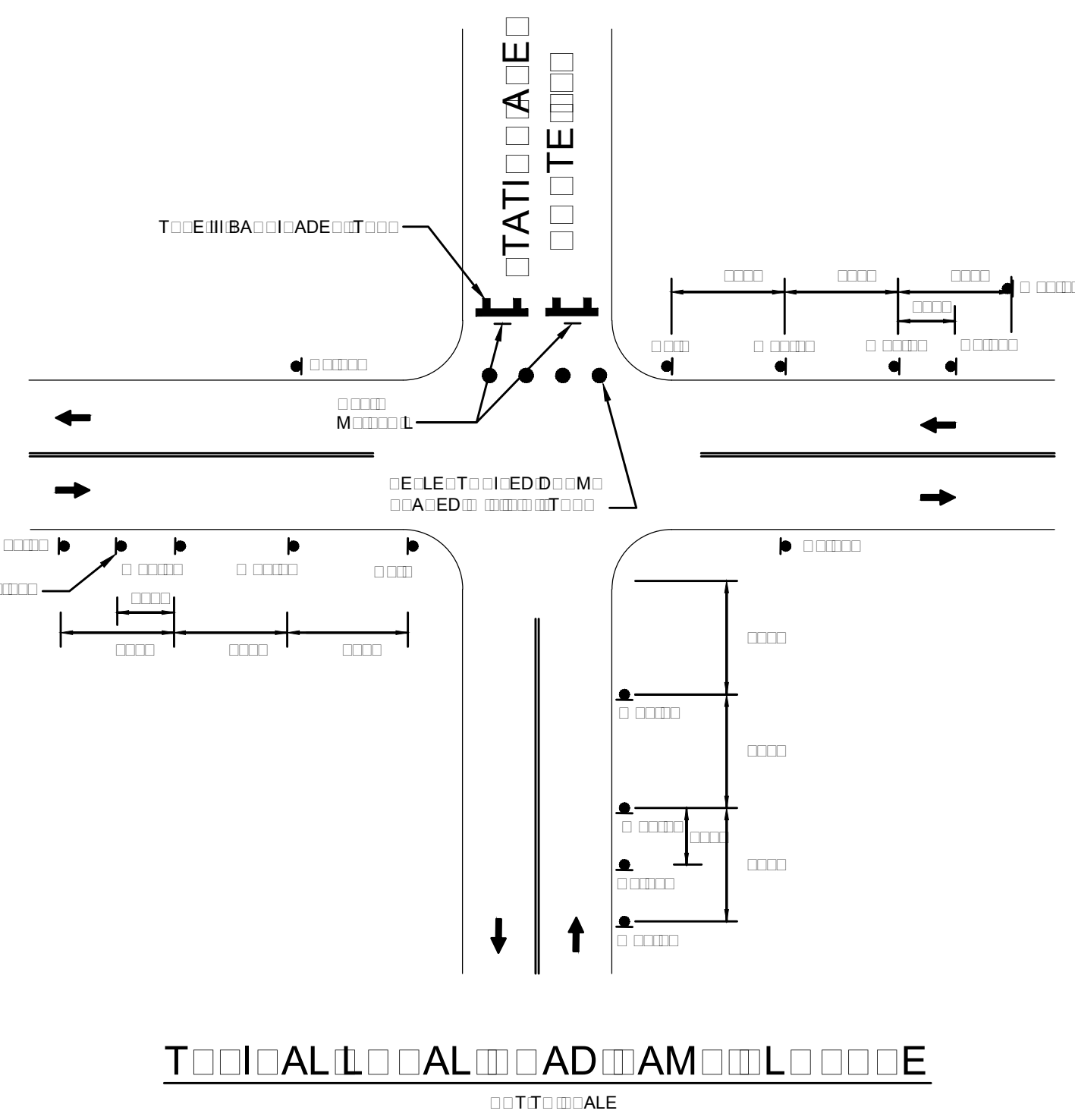
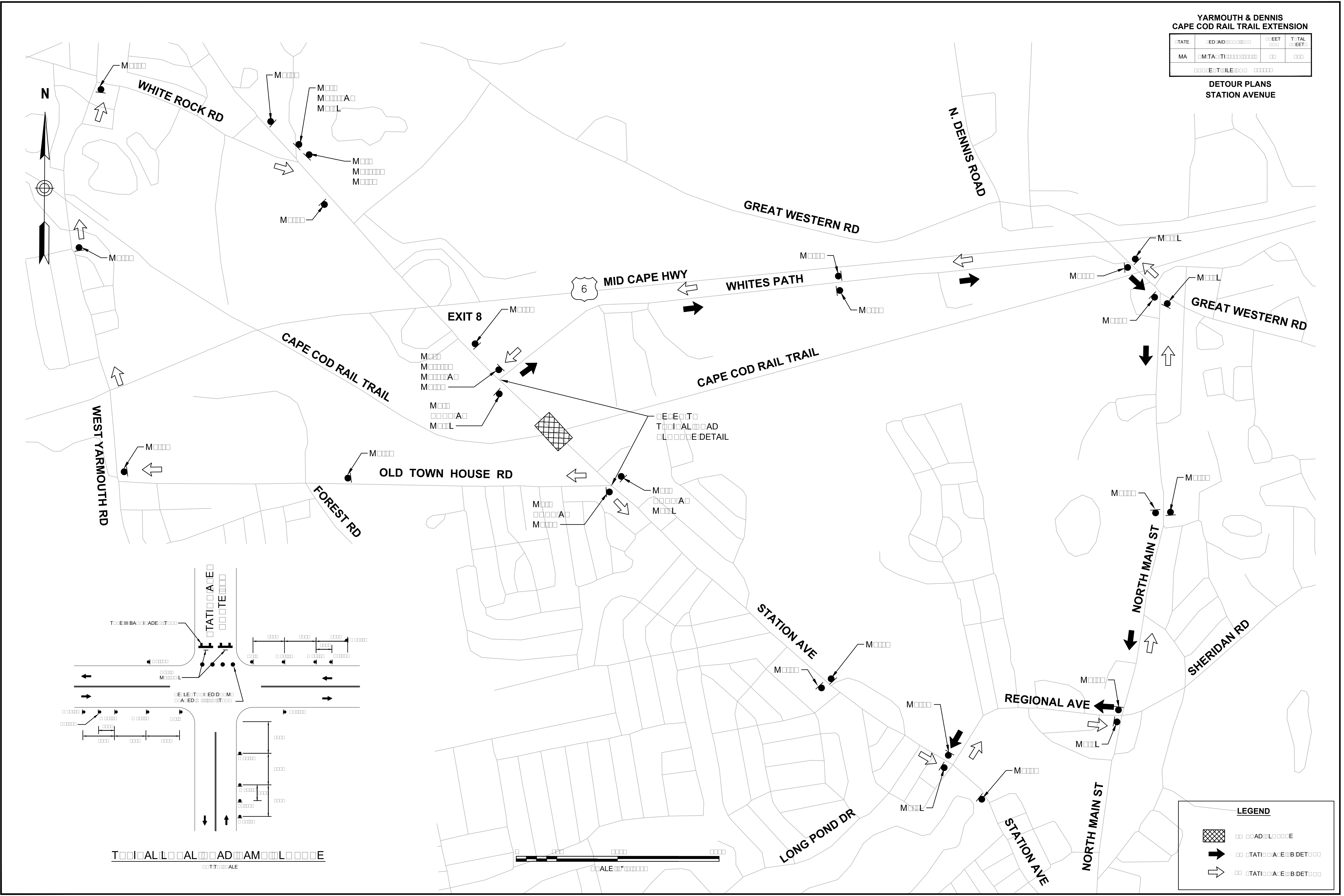
YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	ED AID	FEET	TOTAL
MA	MTA		

DETOUR PLANS  
STATION AVENUE

LEGEND

- AD
- STATION AVE
- STATION AVE





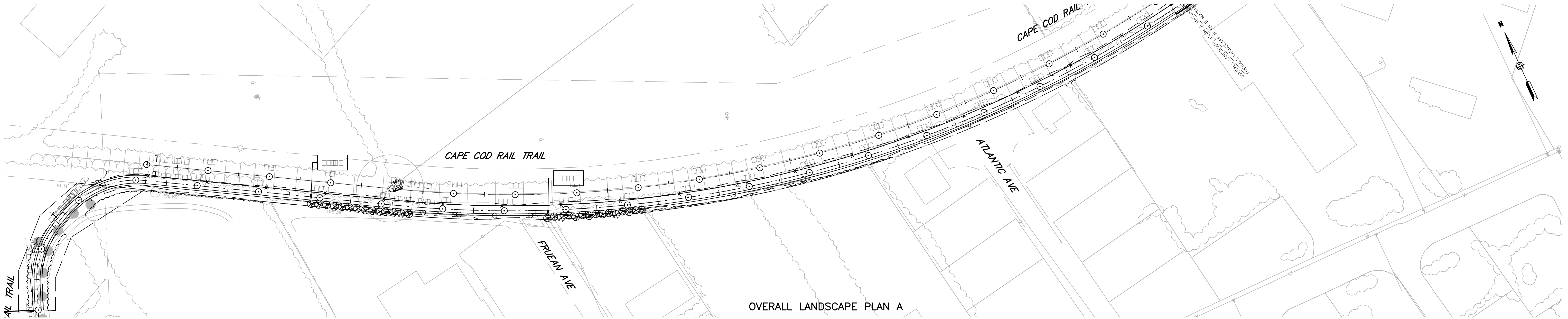


PLANT MATERIAL SCHEDULE					
QTY.	KEY	BOTANICAL NAME	COMMON NAME	UNIT.	SIZE
EVERGREEN TREES					
36	PS	PINUS STROBUS	WHITE PINE	EA	5-6' H

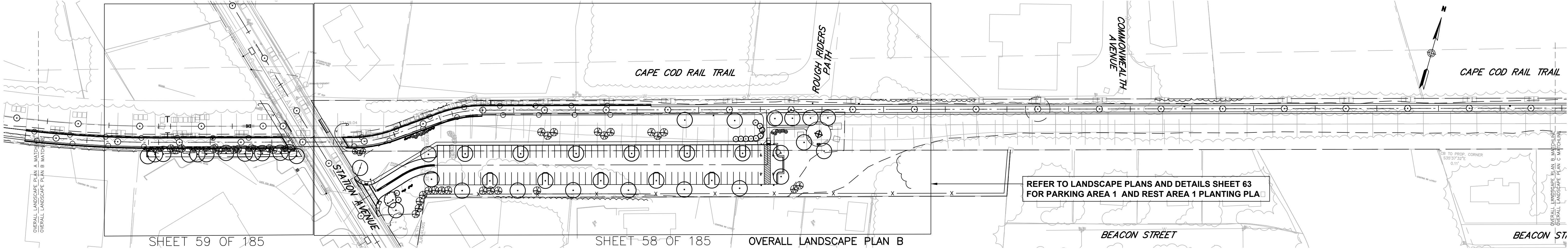
NOTE:  
ALL AREAS WITH LIMITS TO BE PLANTED WITH TREES TO BE ADDED TO THE SCHEDULE.  
ALL AREAS WITH LIMITS TO BE PLANTED WITH TREES TO BE ADDED TO THE SCHEDULE.  
LANDSCAPE ARCHITECTURE  
ALL AREAS WITH LIMITS TO BE PLANTED WITH TREES TO BE ADDED TO THE SCHEDULE.

YARMOUTH & DENNIS CAPE COD RAIL TRAIL EXTENSION			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/TI-002S(758)X	54	185
PROJECT FILE NO. 604488			

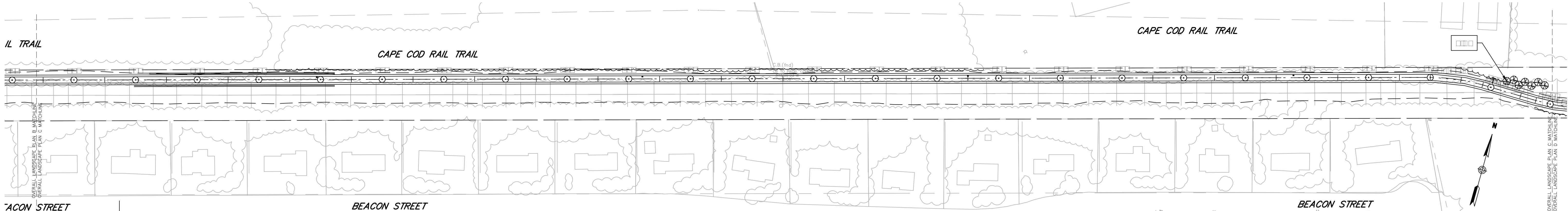
LANDSCAPE PLANS AND DETAILS



OVERALL LANDSCAPE PLAN A  
PLAN  
1"=80'-0"



OVERALL LANDSCAPE PLAN B  
PLAN  
1"=80'-0"



OVERALL LANDSCAPE PLAN C  
PLAN  
1"=80'-0"











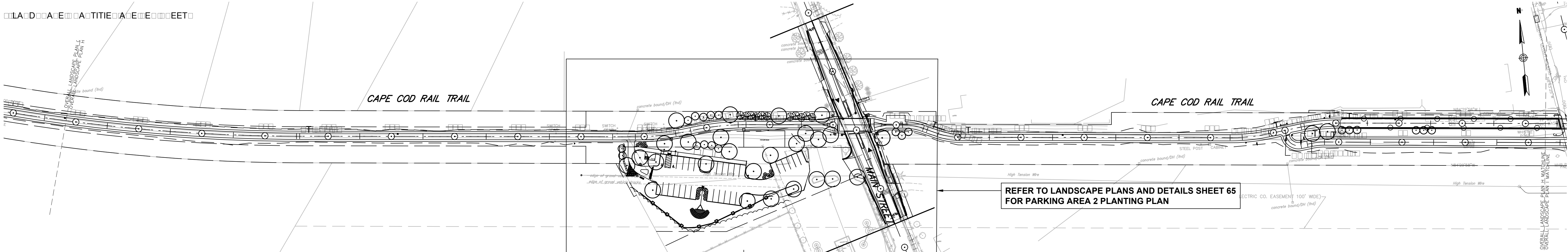
YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/TI-002S(758)X	57	185
PROJECT FILE NO. 604488			

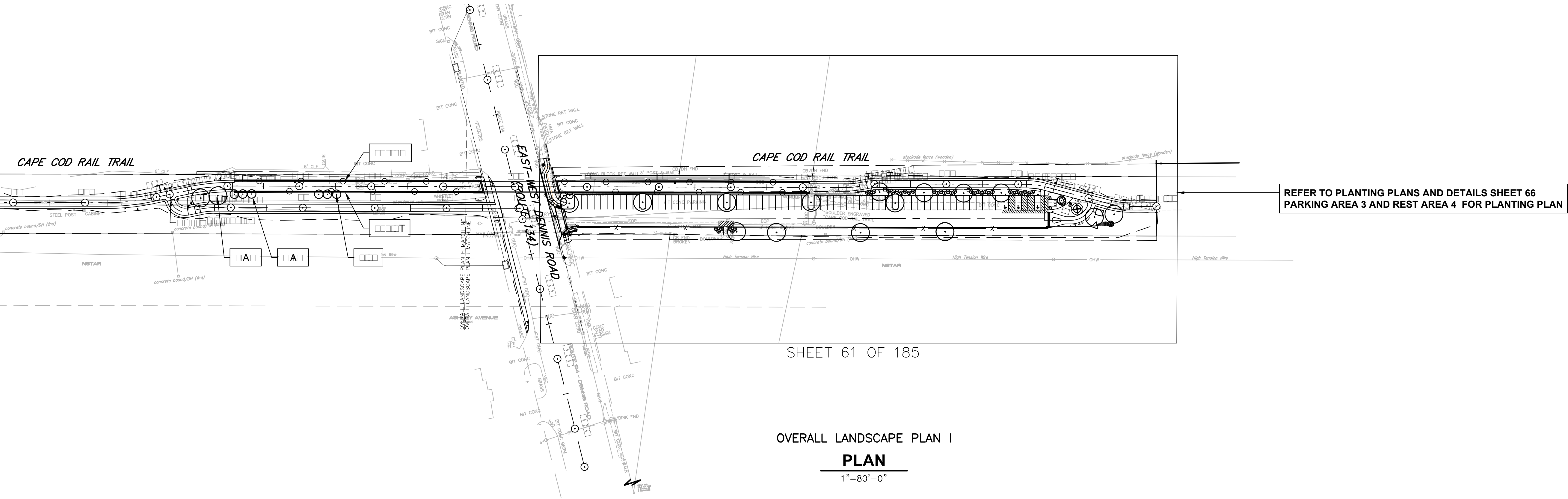
LANDSCAPE PLANS AND DETAILS

PLANT MATERIAL SCHEDULE					
QTY.	KEY	BOTANICAL NAME	COMMON NAME	UNIT.	SIZE
EVERGREEN TREES					
3	JV	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	EA	4-5'
SHADE TREES					
3	AC	AMELANCHIER CANADENSIS	SERVICEBERRY	EA	6-7'
2	AR	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	EA	2"-2.5" CAL
PERENNIALS/GROUNDCOVERS					
700	PQ	PARTHENOCISSUS QUINQUEFOLIA	VIRGINIA CREEPER	EA	1 GAL
700	PT	PARTHENOCISSUS TRICUSPIDATA	BOSTON IVY	EA	1 GAL

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SHEET 60 OF 185  
OVERALL LANDSCAPE PLAN H  
**PLAN**  
1"=80'-0"

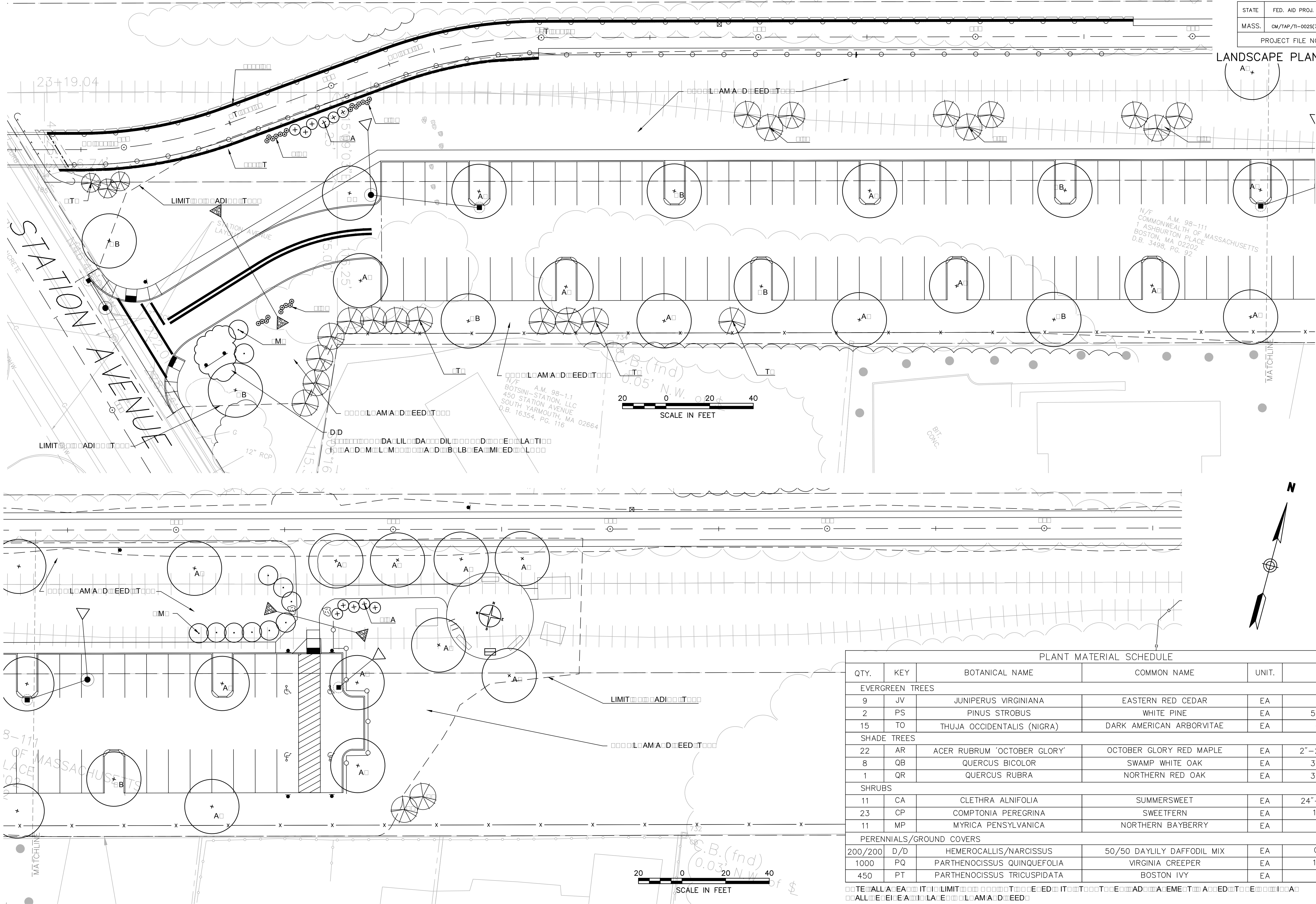


SHEET 61 OF 185  
OVERALL LANDSCAPE PLAN I  
**PLAN**  
1"=80'-0"

YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/11-002S(758)X	58	185
PROJECT FILE NO. 604488			

LANDSCAPE PLANS AND DETAILS



PLANT MATERIAL SCHEDULE

QTY.	KEY	BOTANICAL NAME	COMMON NAME	UNIT.	SIZE
EVERGREEN TREES					
9	JV	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	EA	4-5'
2	PS	PINUS STROBUS	WHITE PINE	EA	5-6' H
15	TO	THUJA OCCIDENTALIS (NIGRA)	DARK AMERICAN ARBORVITAE	EA	6-7'
SHADE TREES					
22	AR	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	EA	2"-2.5" CAL
8	QB	QUERCUS BICOLOR	SWAMP WHITE OAK	EA	3" CAL
1	QR	QUERCUS RUBRA	NORTHERN RED OAK	EA	3" CAL
SHRUBS					
11	CA	CLETHRA ALNIFOLIA	SUMMERSWEET	EA	24"-36" HT
23	CP	COMPTONIA PEREGRINA	SWEETFERN	EA	1 GAL
11	MP	MYRICA PENSYLVANICA	NORTHERN BAYBERRY	EA	2-3'
PERENNIALS/GROUND COVERS					
200/200	D/D	HEMEROCALLIS/NARCISSUS	50/50 DAYLILY DAFFODIL MIX	EA	CONT.
1000	PQ	PARTHENOCISSUS QUINQUEFOLIA	VIRGINIA CREEPER	EA	1 GAL
450	PT	PARTHENOCISSUS TRICUSPIDATA	BOSTON IVY	EA	2-3'

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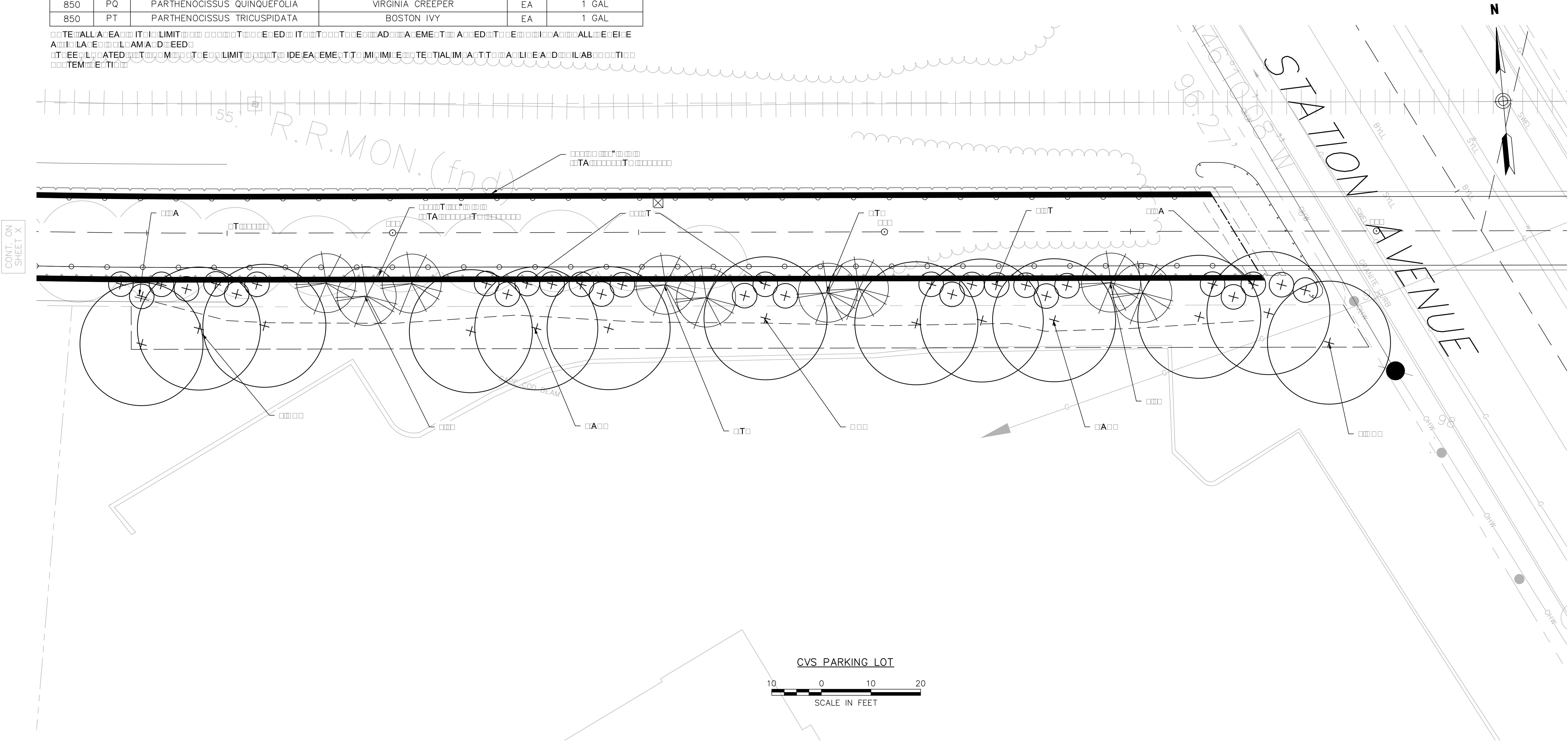
YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/TI-002S(758)X	59	185
PROJECT FILE NO. 604488			

LANDSCAPE PLANS AND DETAILS

PLANT MATERIAL SCHEDULE					
QTY.	KEY	BOTANICAL NAME	COMMON NAME	UNIT.	SIZE
EVERGREEN TREES					
5	JV	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	EA	4-5'
4	TO	THUJA OCCIDENTALIS (NIGRA)	DARK AMERICAN ARBORVITAE	EA	6'-7'
SHADE TREES					
6	AR*	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	EA	3" CAL
7	QR*	QUERCUS RUBRA	NORTHERN RED OAK	EA	3" CAL
SHRUBS					
12	CA	CLETHRA ALNIFOLIA	SUMMERSWEET	EA	24"-36" HT
17	VT	VIBURNUM TRILOBUM	AMERICAN CRANBERRY BUSH VIB.	EA	3'-4'
PERENNIALS/GROUNDCOVERS					
850	PQ	PARTHENOCISSUS QUINQUEFOLIA	VIRGINIA CREEPER	EA	1 GAL
850	PT	PARTHENOCISSUS TRICUSPIDATA	BOSTON IVY	EA	1 GAL

ALL PLANT MATERIAL TO BE PLANTED IN THE FOLLOWING AREAS: (SEE ATTACHED SCHEDULE FOR SPECIFICATIONS)  
ALL PLANT MATERIAL TO BE PLANTED IN THE FOLLOWING AREAS: (SEE ATTACHED SCHEDULE FOR SPECIFICATIONS)  
ALL PLANT MATERIAL TO BE PLANTED IN THE FOLLOWING AREAS: (SEE ATTACHED SCHEDULE FOR SPECIFICATIONS)

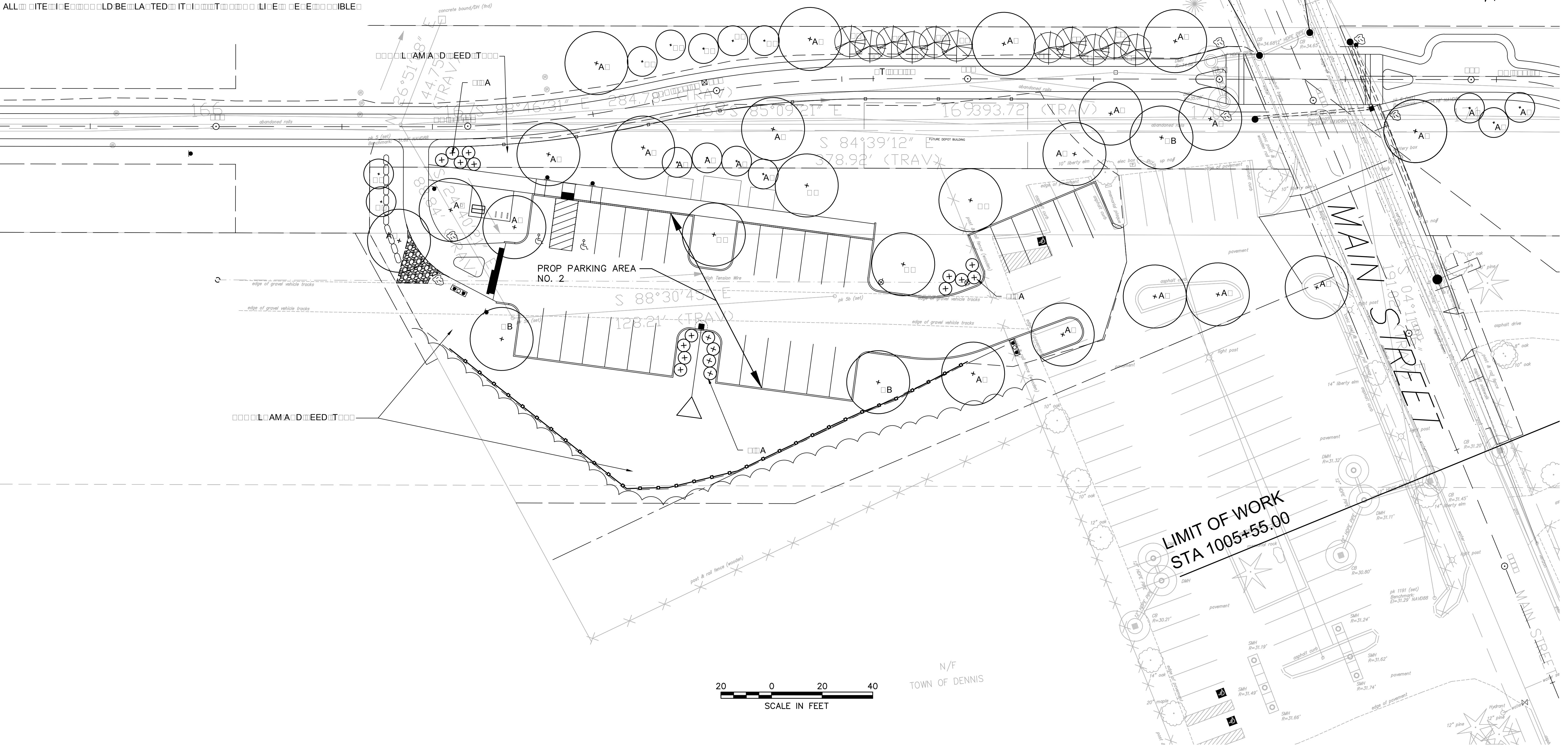


PLANT MATERIAL SCHEDULE					
QTY.	KEY	BOTANICAL NAME	COMMON NAME	UNIT.	SIZE
EVERGREEN TREES					
5	JV	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	EA	4-5'
6	PS	PINUS STROBUS	WHITE PINE	EA	5-6' H
SHADE TREES					
7	AC	AMELANCHIER CANADENSIS	SERVICEBERRY	EA	6-7'
19	AR	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	EA	2"-2.5" CAL
7	HV	HAMAMELIS VIRGINIANA	COMMON WITCHHAZEL	EA	6'-7' HT
3	QB	QUERCUS BICOLOR	SWAMP WHITE OAK	EA	2"-2.5" CAL
4	QR	QUERCUS RUBRA	NORTHERN RED OAK	EA	2"-2.5" CAL
SHRUBS					
18	CA	CLETHRA ALNIFOLIA	SUMMERSWEET	EA	24"-36" HT

THE FOLLOWING LIMITS OF WORK ARE SHOWN ON THIS PLAN. ALL PLANT MATERIAL TO BE PLANTED OR MAINTAINED WITHIN THESE LIMITS SHALL BE PLANTED OR MAINTAINED WITHIN THESE LIMITS.

ALL TREES LOCATED TO THE LEFT OF THE TRAIL BETWEEN THE TOWNSHIP AND THE TOWN OF DENNIS SHALL BE PLANTED OR MAINTAINED WITHIN THESE LIMITS.

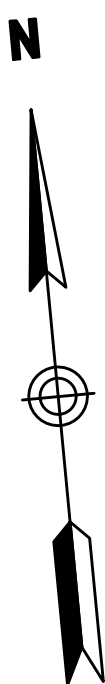
ALL PLANT MATERIAL TO BE PLANTED OR MAINTAINED WITHIN THESE LIMITS SHALL BE PLANTED OR MAINTAINED WITHIN THESE LIMITS.





STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/TT-002S(758)X	61	185
PROJECT FILE NO. 604488			

## LANDSCAPE PLANS AND DETAILS



PLANT MATERIAL SCHEDULE					
QTY.	KEY	BOTANICAL NAME	COMMON NAME	UNIT.	SIZE
SHADE TREES					
1	AC	AMELANCHIER CANADENSIS	SERVICEBERRY	EA	6-7'
11	AR	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	EA	2"-2.5" CAL
4	QR	QUERCUS RUBRA	NORTHERN RED OAK	EA	3" CAL
SHRUBS					
23	CA	CLETHRA ALNIFOLIA	SUMMERSWEET	EA	24"-36" HT
3	MP	MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	EA	2-3'
14	VT	VIBURNUM TRILOBUM	AMERICAN CRANBERRY BUSH	EA	1 GAL
PERENNIALS/GROUND COVERS					
550/550	D/D	HEMEROCALLIS/NARCISSUS	50/50 DAYLILY DAFFODIL MIX	EA	CONT.
700	PQ	PARTHENOCISSUS QUINQUEFOLIA	VIRGINIA CREEPER	EA	1 GAL
700	PT	PARTHENOCISSUS TRICUSPIDATA	BOSTON IVY	EA	2-3'

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ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED

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WEALTH ELECTRIC CO. EASEMENT 100' WIDE) ➔

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/11-002S(758)X	62	185
PROJECT FILE NO. 604488			






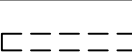


TREES MARKED WITH \* ARE SIZED SPECIFICALLY FOR PLANTING PLAN ON SHEET 59

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A□□L□□AT□□□□ATE□□□□LB□□A□□E	
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BI□BL□E□TEM	A□D□□□□□□□□□E□A□D□II
LITTLE BL□E□TEM	□□□□A□□□□□□M□□□□□A□□□M
I□D□IA□□□□□A□□	□□□□□CA□T□□□□□□T□□□
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□□IT□□□□□□A□□□	□A□□□□□□□□□□AT□□M
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\* SEED MIX B1 TO BE UTILIZED ON ALL SLOPES 3:1 OR GREATER OVER MODIFIED ROCKFILL, AND WITHIN ALL INFILTRATION BASINS AND SWALES.

\* SEED MIX A1 TO BE UTILIZED ON ALL OTHER DISTURBED AREAS.

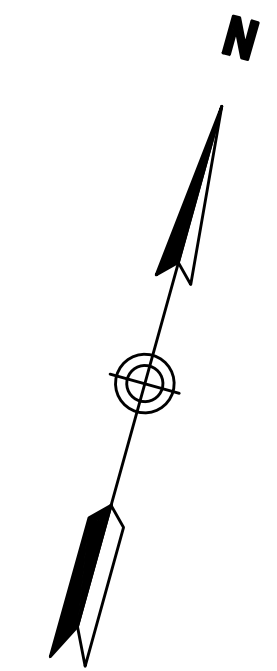
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- \* PLANT DAYLILYS AND DAFFODILS IN RANDOM CLUMPS OF 3 AND 7 BULBS EACH, MIXED COLORS.
- \* PLANT DAFFODIL BULBS IN MIN 3X BULB DIAMETER DEPTH.
- \* PLANT DAYLILY CROWN MAX 1 INCH BELOW SOIL SURFACE AND SPREAD ROOTS.

RT 134 EXISTING TRAIL HEAD — EXISTING PLANT INVENTORY			
QTY.	BOTANICAL NAME	COMMON NAME	AVG. SIZE
TREES			
15	AMELANCHIER sp.	SERVICEBERRY	8'–15' HT
6	CHAMAECYPARIS THYOIDES	EASTERN WHITE CEDAR	12'
1	HAMAMMELIS VIRGINIANA	COMMON WITCHHAZEL	7'
2	QUERCUS PALUSTRIS	PIN OAK	3" CAL
5	PINUS STROBUS	EASTERN WHITE PINE	15'
SHRUBS			
16	ARONIA MELANCARPA	BLACK CHOKEBERRY	4'
4	CLETHRA ALNIFOLIA	SUMMERSWEET	4'
50+ / –	COMPTONIA PEREGRINA	SWEETFERN	CLUMP
7	CORNUS SERICEA	REDTWIG DOGWOOD	3'
14	FOTHERGILLA sp.	WITCH ALDER	4'
10	MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	3'
4	VIBURNUM DENTATUM	ARROWOOD VIBURNUM	4'
2	VIBURNUM TRILOBUM	CRANBERRYBUSH VIBURNUM	3'
GROUND COVER / GRASSES			
17	LIROPE MUSCARI	LILYTURF	CLUMP
50+	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	CLUMP



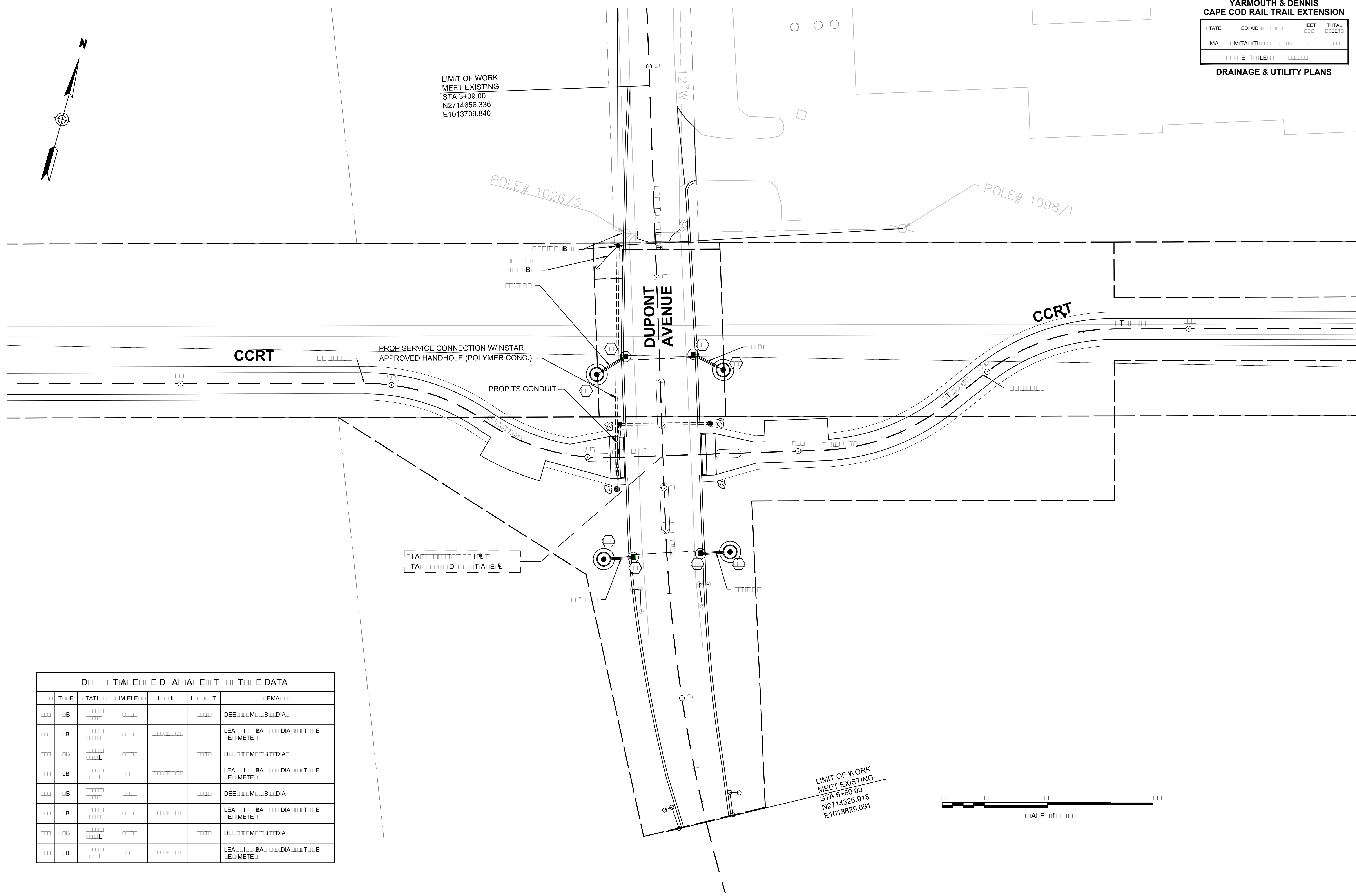




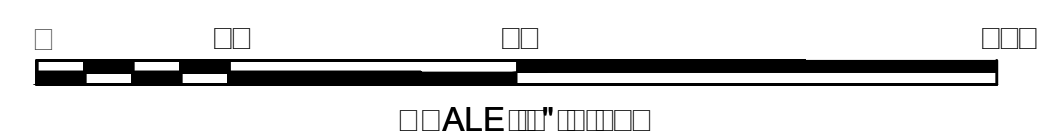
YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	ED AID	FEET	TOTAL
MA	MTA		
E		FILE	

DRAINAGE & UTILITY PLANS



DRAINAGE & UTILITY DATA						
NO	TOE	STATION	TIME	DATE	TIME	DATE
1	B	1000	1000			DEE
2	LB	1000	1000			LEA
3	B	1000	1000			DEE
4	LB	1000	1000			LEA
5	B	1000	1000			DEE
6	LB	1000	1000			LEA
7	B	1000	1000			DEE
8	LB	1000	1000			LEA



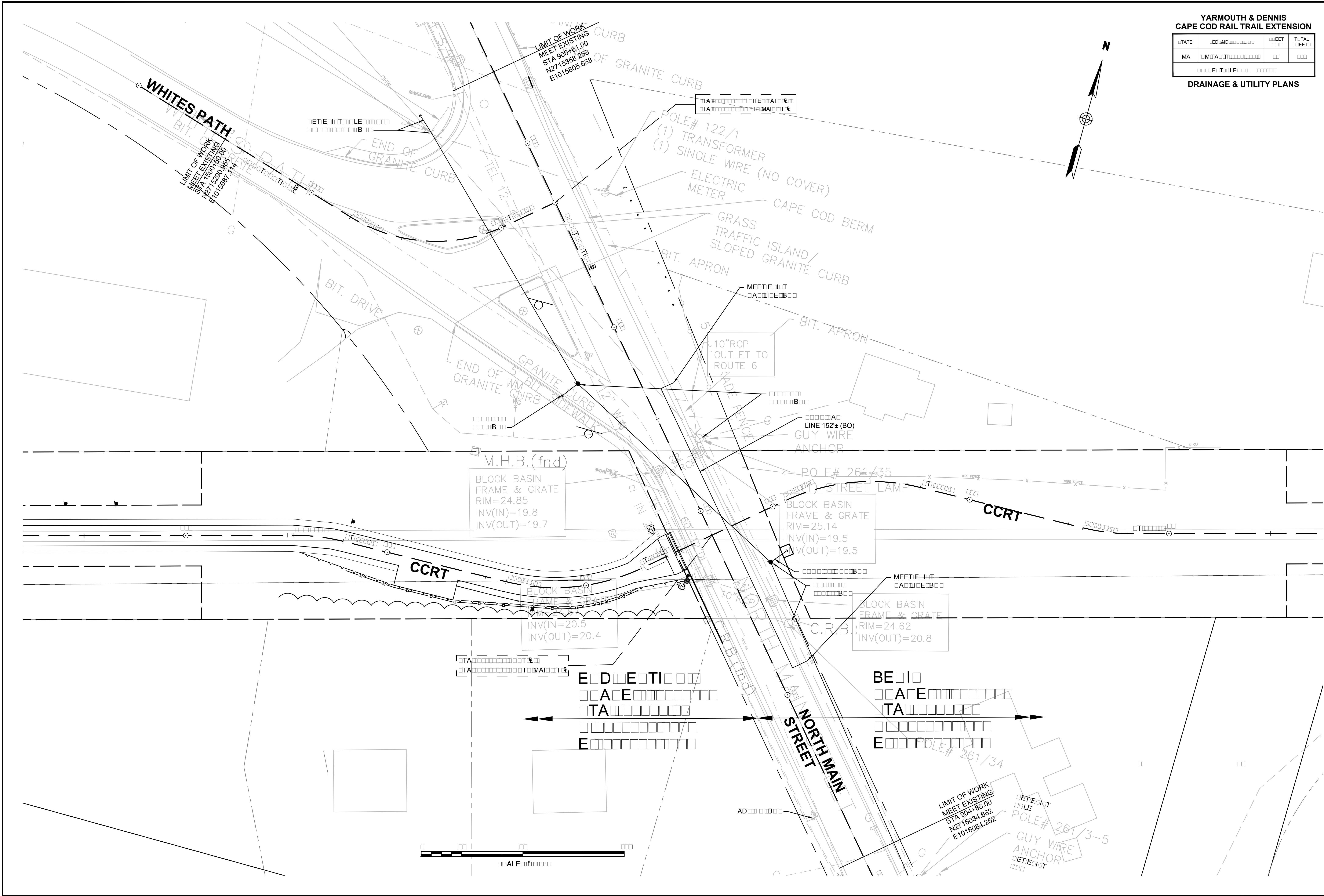
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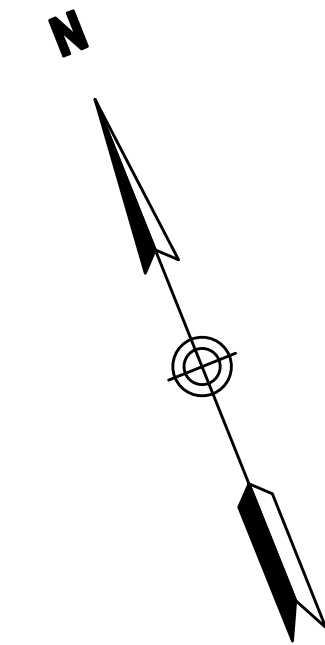


YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	ED AID	MEET	TOTAL
MA	MTA		

DRAINAGE & UTILITY PLANS

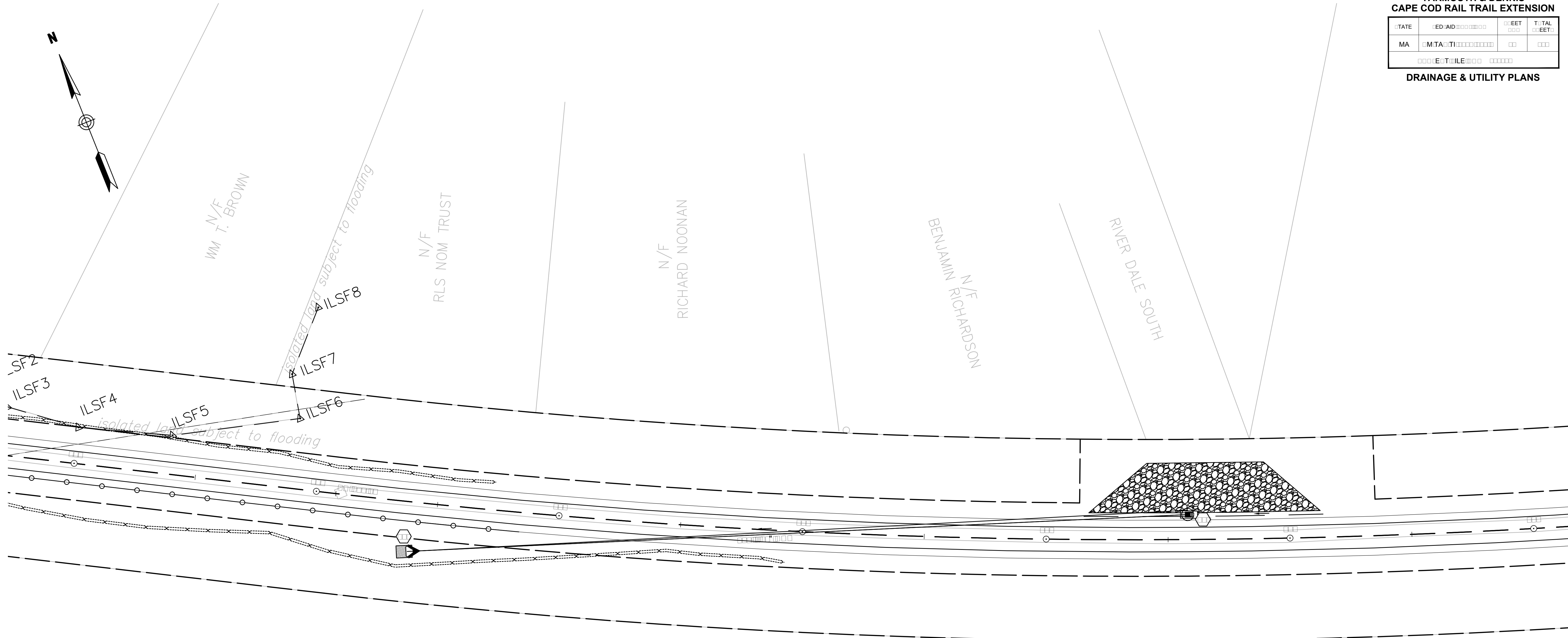




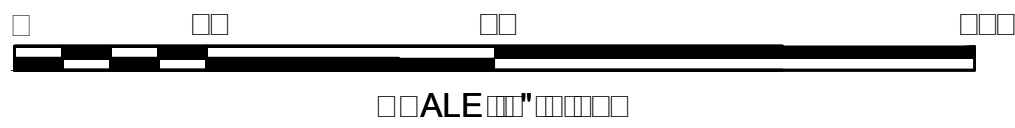
YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

STATE	ED AID	SHEET	TOTAL
MA	MTA		
E T L E			

DRAINAGE & UTILITY PLANS



DATE	TIME	STATION	TIME	DATE	TIME	DATA
	B					
	E					



DATE: 10/10/2010 TIME: 10:00 AM



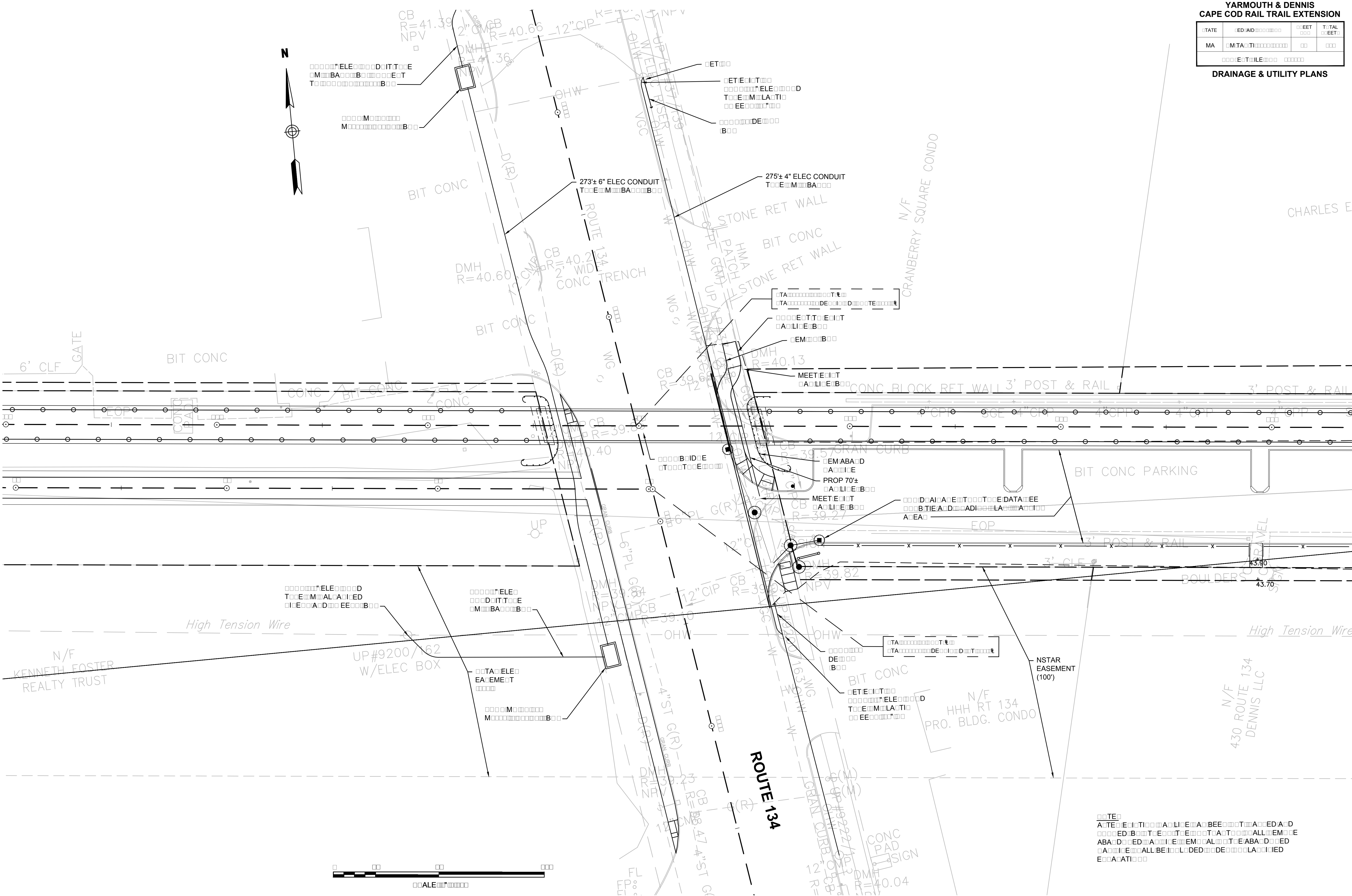




YARMOUTH & DENNIS  
CAPE COD RAIL TRAIL EXTENSION

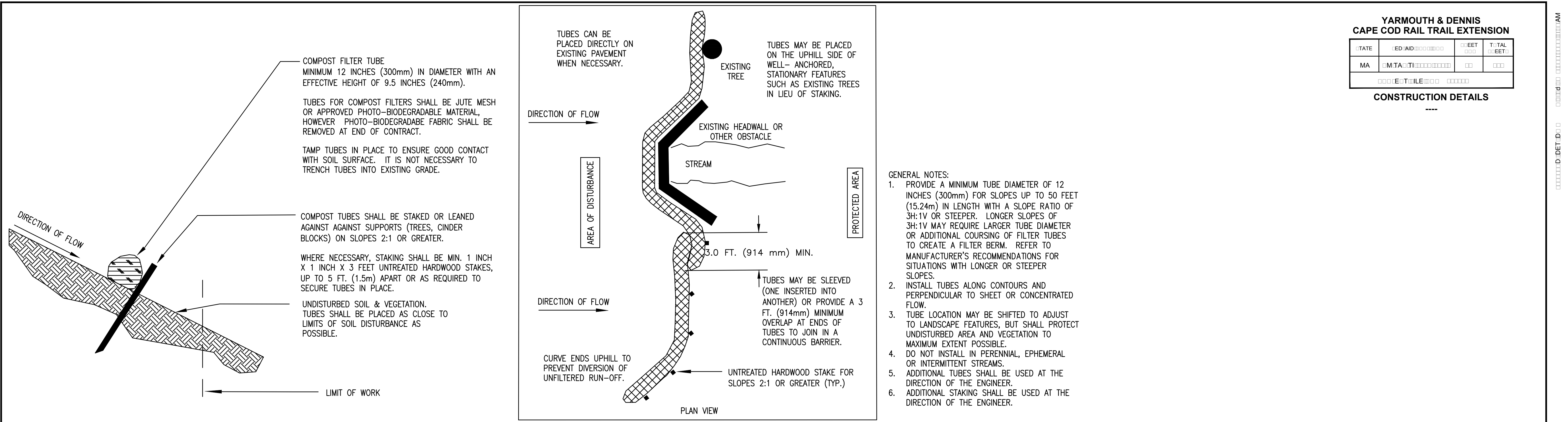
STATE	ED AID	FEET	TOTAL
MA	MTA		
E T L E			

DRAINAGE & UTILITY PLANS



NOTED  
AUTOMATICALLY  
ABANDONED  
EASements

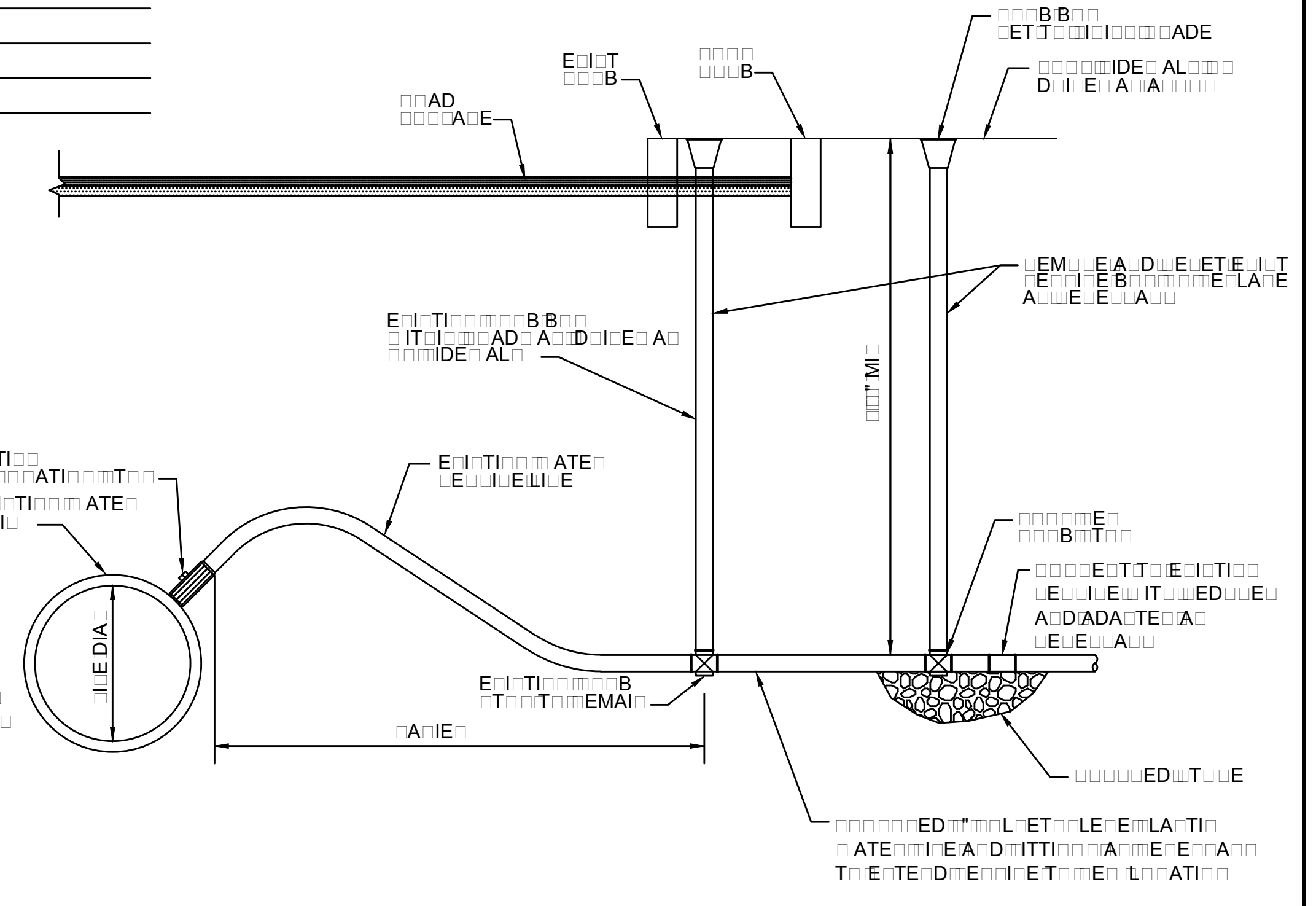
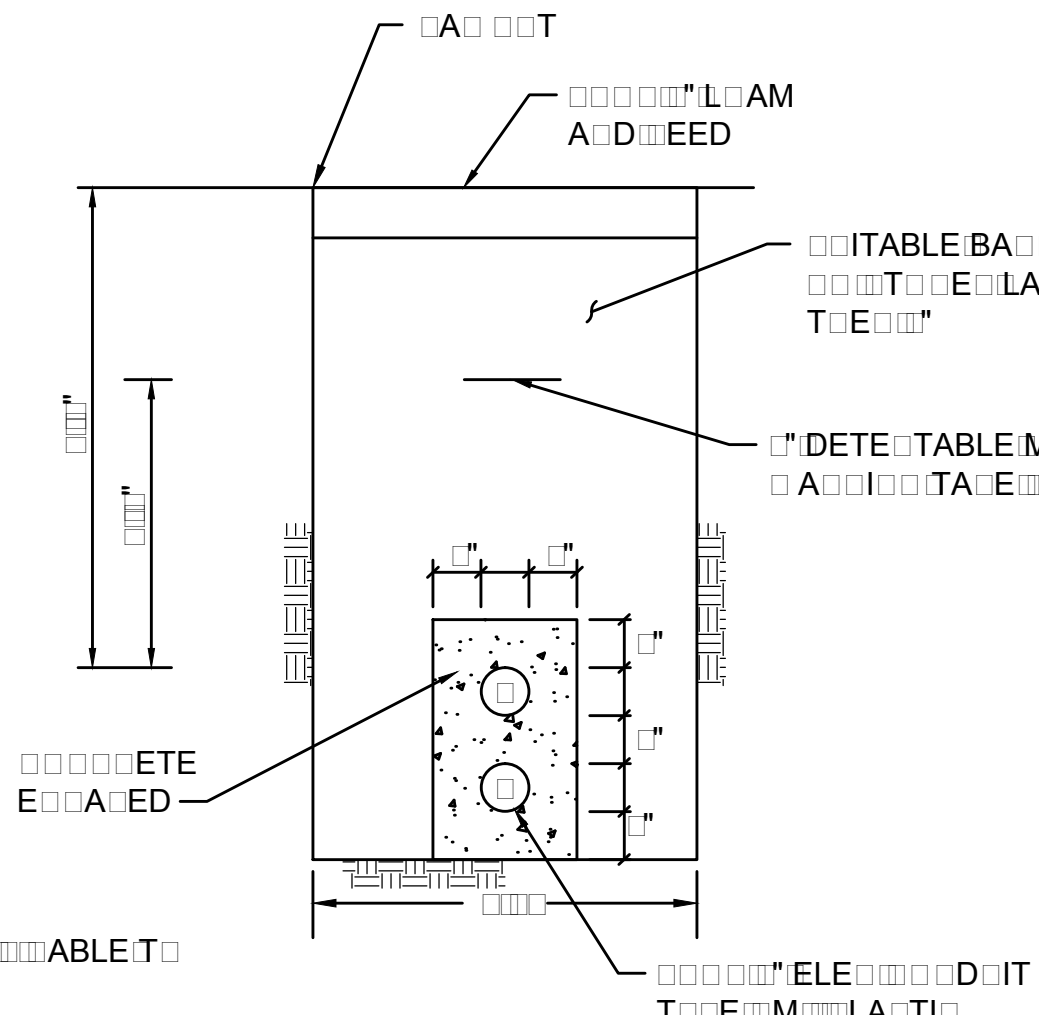
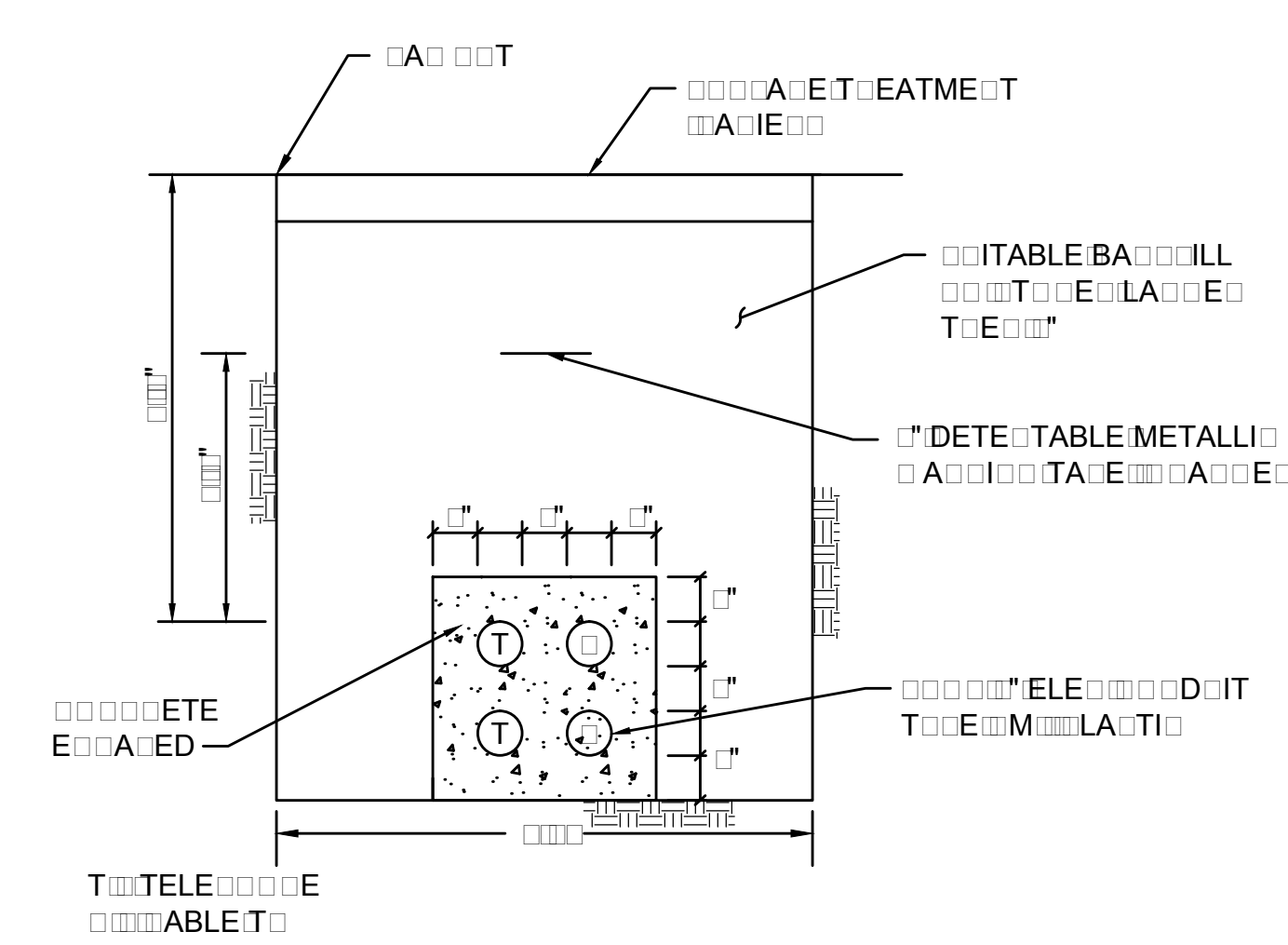
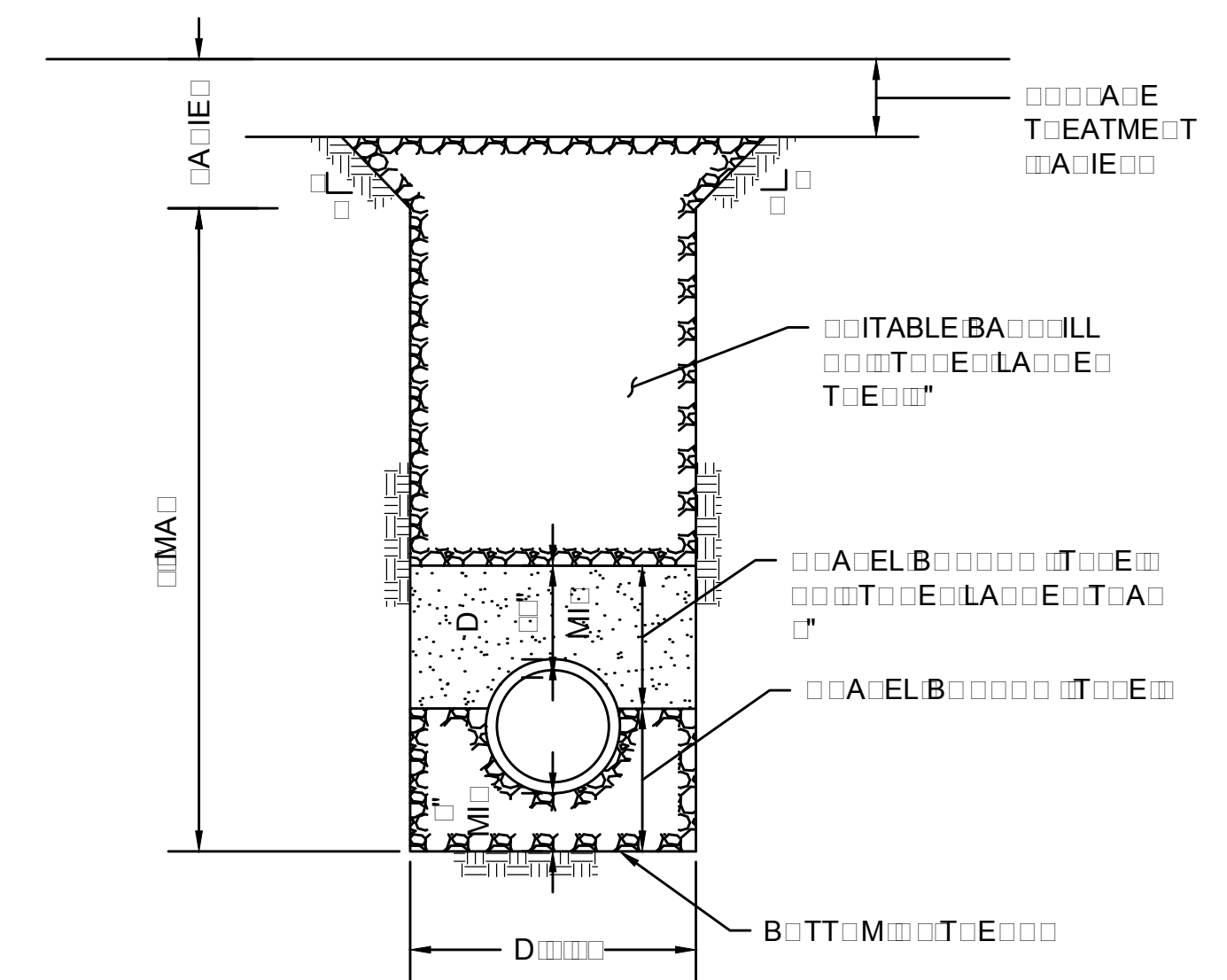




YARMOUTH & DENNIS CAPE COD RAIL TRAIL EXTENSION			
STATE	ED AID	SHEET	TOTAL
MA	MTA	00	00
CONSTRUCTION DETAILS			

COMPOST FILTER TUBE

SCALE: NOT TO SCALE  
DATE: 6-13-2014 (MASSDOT)



1" ELECTRICIAL DIT

SCALE: NOT TO SCALE  
DATE: 6-13-2014 (MASSDOT)

1" ELECTRICIAL DIT

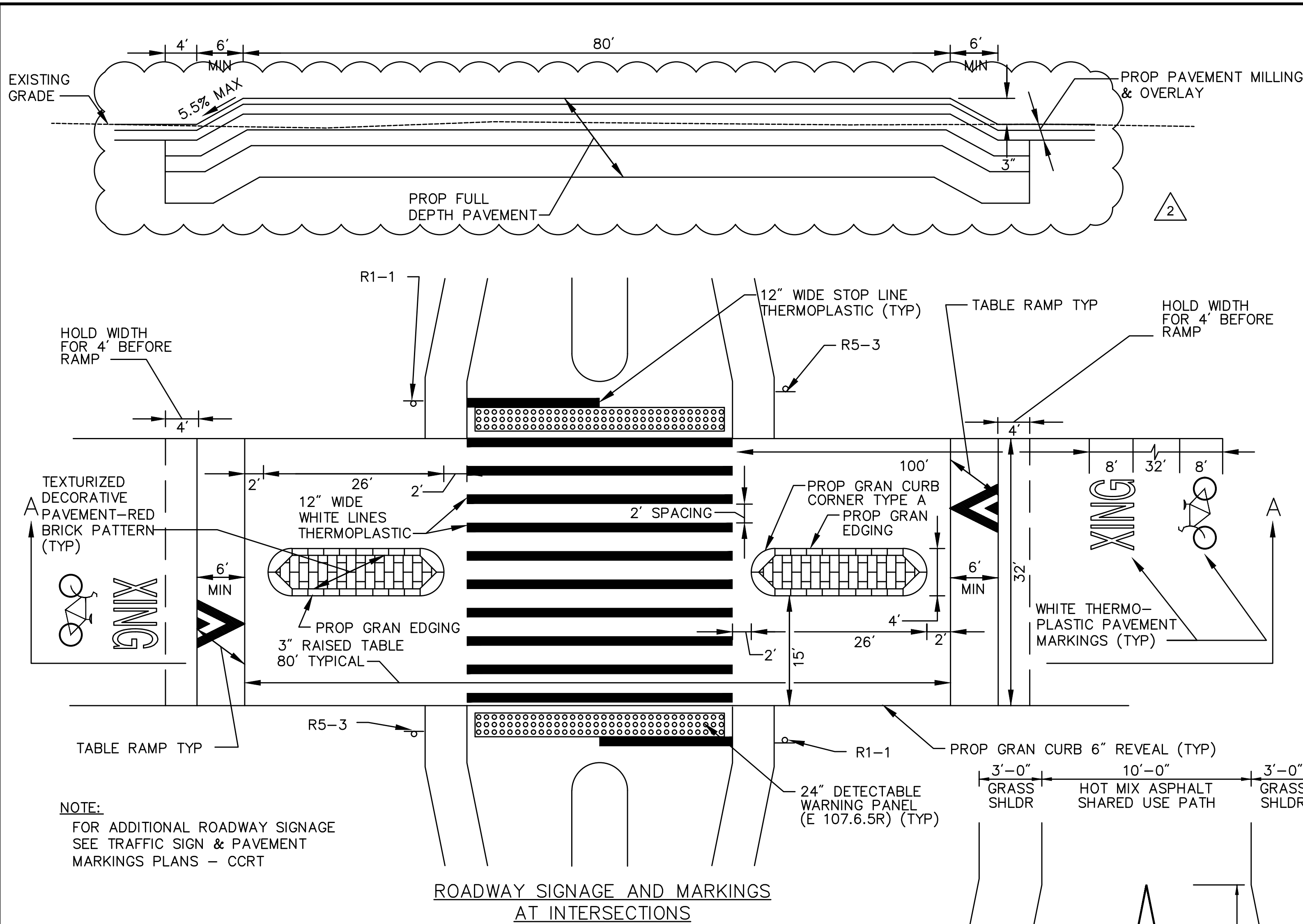
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DATE: 6-13-2014 (MASSDOT)

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SCALE: NOT TO SCALE  
DATE: 6-13-2014 (MASSDOT)



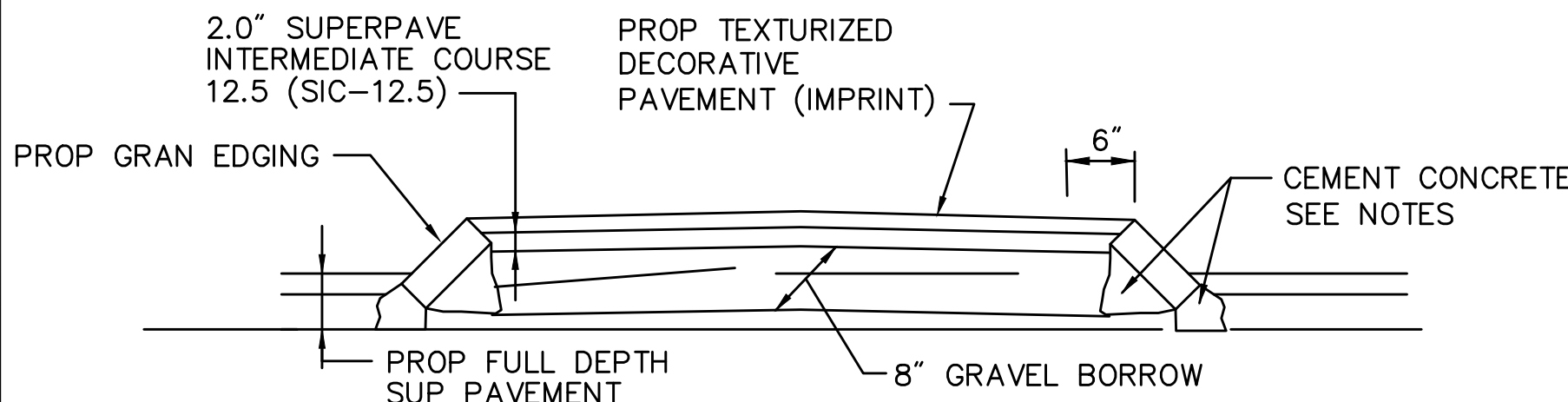




NOTE:  
FOR ADDITIONAL ROADWAY SIGNAGE  
SEE TRAFFIC SIGN & PAVEMENT  
MARKINGS PLANS - CCRT

ROADWAY SIGNAGE AND MARKINGS  
AT INTERSECTIONS

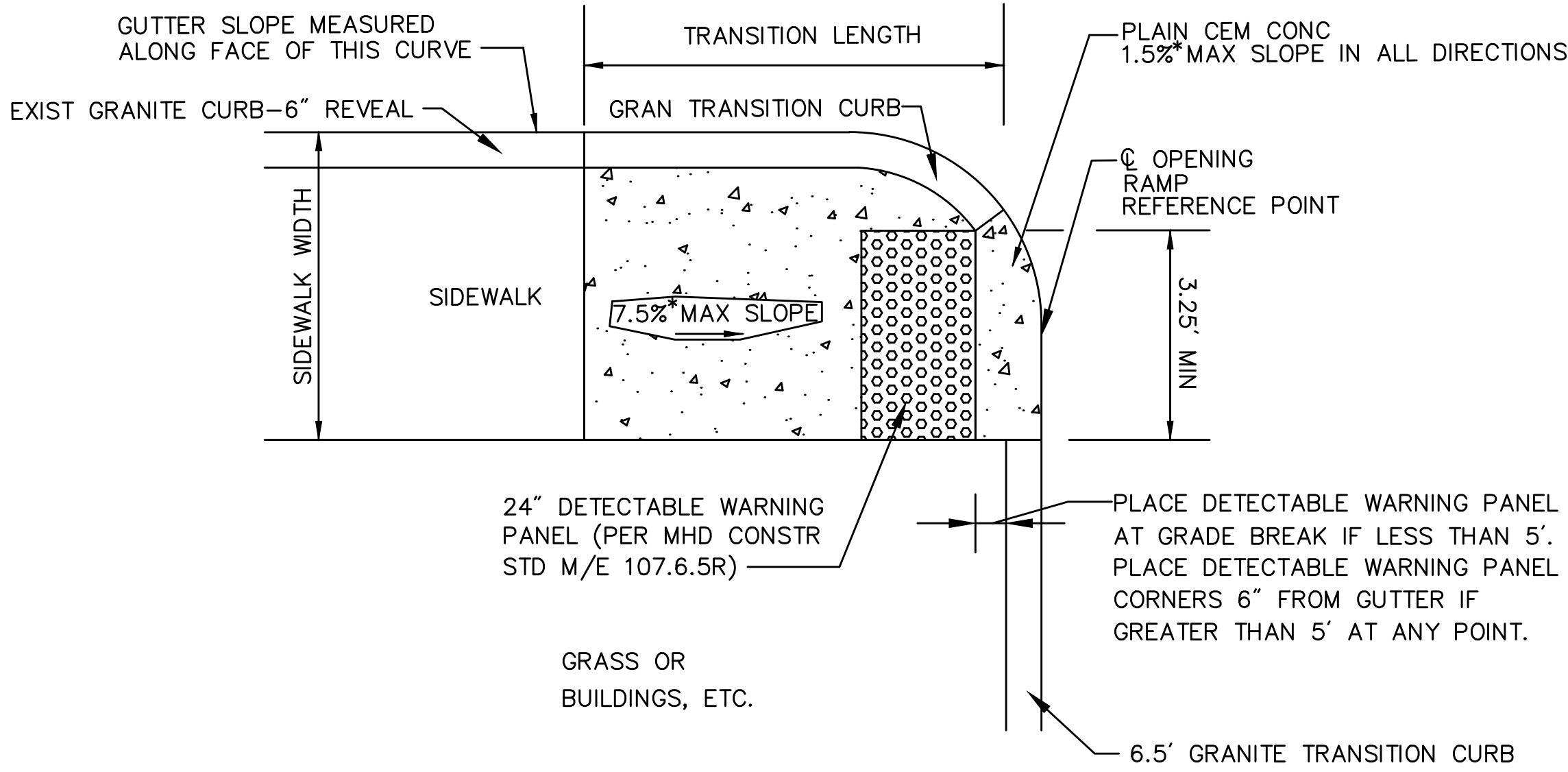
TYPICAL AT-GRADE INTERSECTION WITH RAISED TABLE	
SCALE:	NOT TO SCALE
DATE:	
DWG:	



SECTION A-A

- NOTES:
- PAYMENT FOR CEMENT CONCRETE FOR EDGING INSTALLATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR GRANITE EDGING.
  - PAYMENT FOR SUPERPAVE INTERMEDIATE COURSE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR TEXTURIZED DECORATIVE PAVEMENT (IMPRINT).

SPLITTER ISLAND AND SHARED USE PATH WHEELCHAIR RAMP	
SCALE:	NOT TO SCALE
DATE:	DEC 2005
DWG:	



WHEELCHAIR RAMP DATA											
NO.	LOCATION	SIDEWALK WIDTH	LEFT SIDE			RIGHT SIDE			C. OPENING ELEVATION	LEVEL LANDING	RAMP LENGTH
			ROADWAY GUTTER	REVEAL	TRANS	ROADWAY GUTTER	REVEAL	TRANS			
17	ROUTE 134 1103+33.6 29.9' RT	5'-6"	-0.9%	6"	6'-6"	--	--	--	39.9	4'	6'-6"
18	ROUTE 134 1105+59.0 29.6' RT	5'-6"	--	--	--	2.0%	6"	9'-0"	38.8	4'	9'-0"

NOTE:  
NEGATIVE (-) ROADWAY GUTTER SLOPE DENOTES A LOW SIDE TRANSITION.

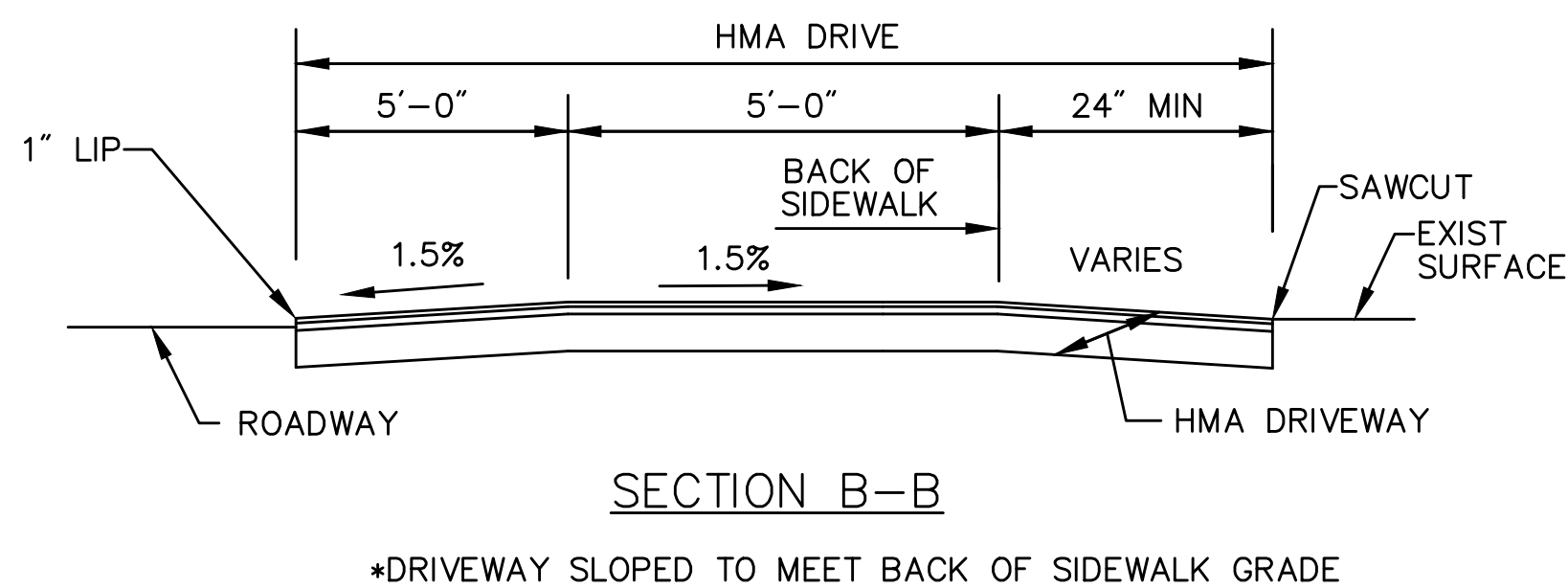
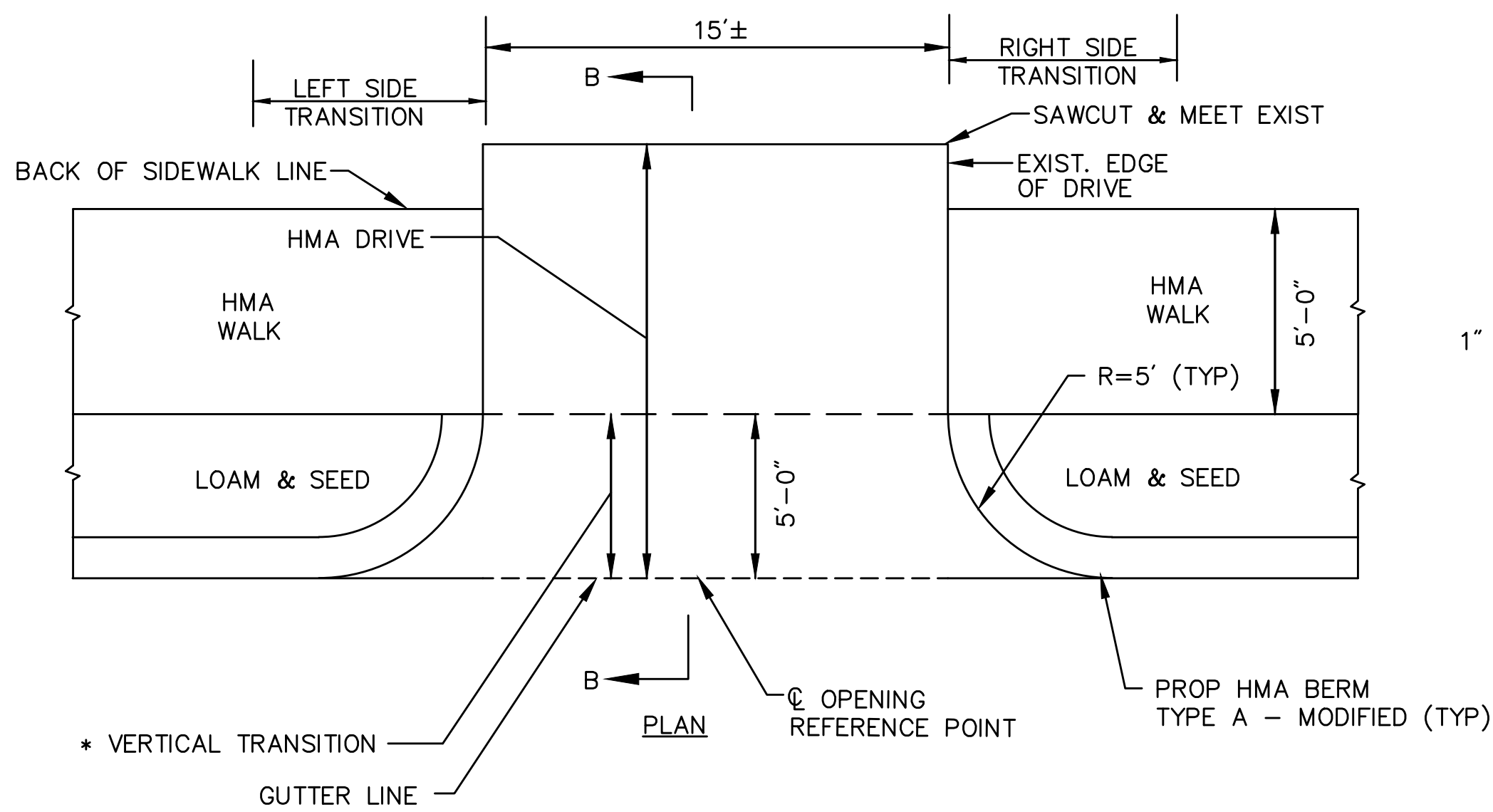
WHEELCHAIR RAMP DATA											
NO.	LOCATION	RAMP WIDTH	LEFT SIDE			RIGHT SIDE			C. OPENING ELEVATION	LEVEL LANDING	RAMP LENGTH
			ROADWAY GUTTER	REVEAL	TRANS	ROADWAY GUTTER	REVEAL	TRANS			
1	DUPONT AVE. 4+87.7 18.00' RT	20'-0"	-0.7%	3"	--	+0.7%	3"	--	34.6	4'	7'-0"
2	DUPONT AVE. 4+87.7 18.00' LT	20'-0"	+0.7%	3"	--	-0.7%	3"	--	34.6	4'	7'-0"
5	NORTH MAIN ST. 903+13.1 18.00' RT	20'-0"	-0.6%	3"	--	-0.5%	3"	--	25.2	4'	7'-0"
7	MAIN ST. 1003+83.5 18.00' RT	20'-0"	-1.9%	3"	--	+1.9%	3"	--	34.7	4'	7'-0"
8	MAIN ST. 1003+98.4 18.00' LT	20'-0"	+1.9%	3"	--	-1.9%	3"	--	34.5	4'	7'-0"

- NOTE:
- NEGATIVE (-) ROADWAY GUTTER SLOPE DENOTES A LOW SIDE TRANSITION.
  - RAMP DATA INCLUDED FOR INFORMATIONAL PURPOSES ONLY. NO CURB TRANSITIONS OCCUR AT SPLITTER ISLAND WHEEL CHAIR RAMPS. ROADWAY EDGE IS HMA BERM TYPE A MODIFIED. NO SIDEWALKS PROPOSED PARALLEL WITH ROADWAYS.

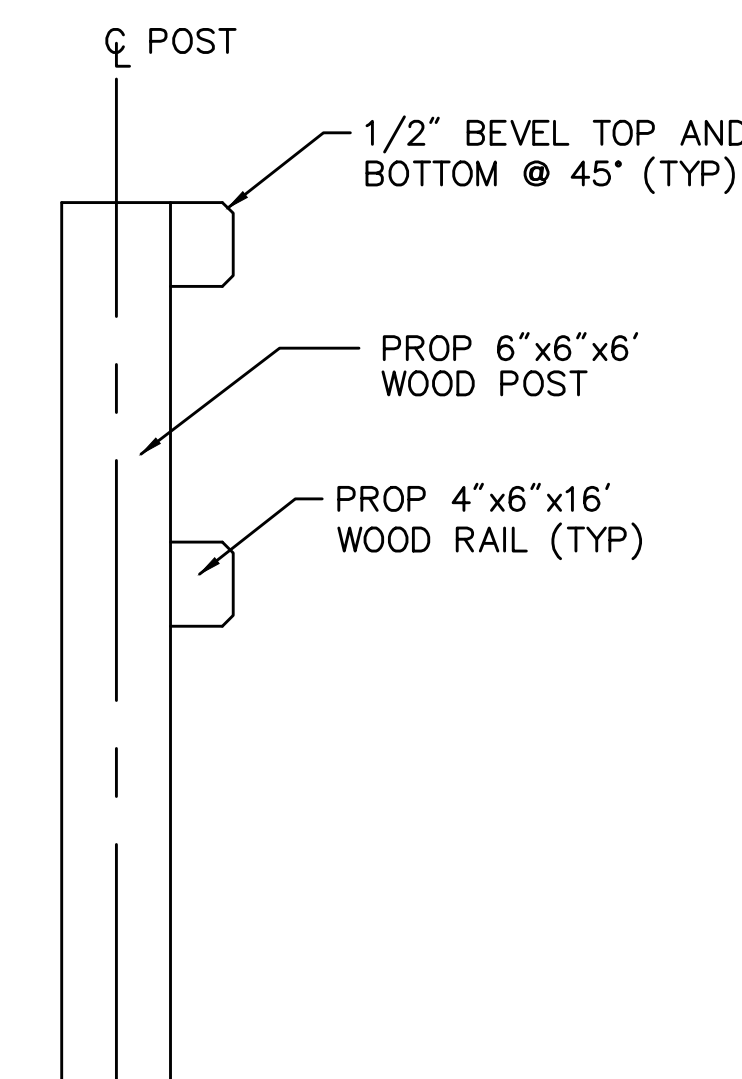
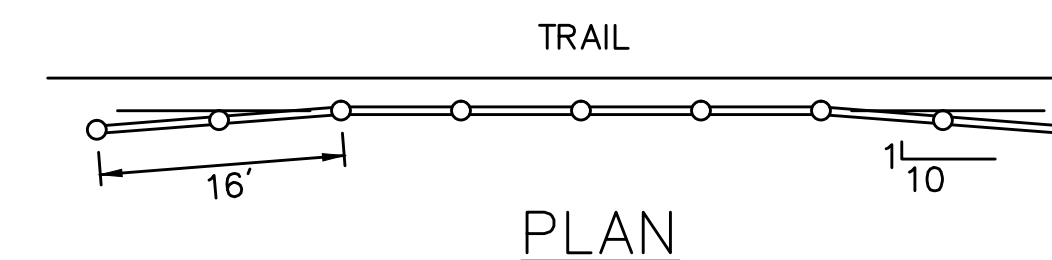
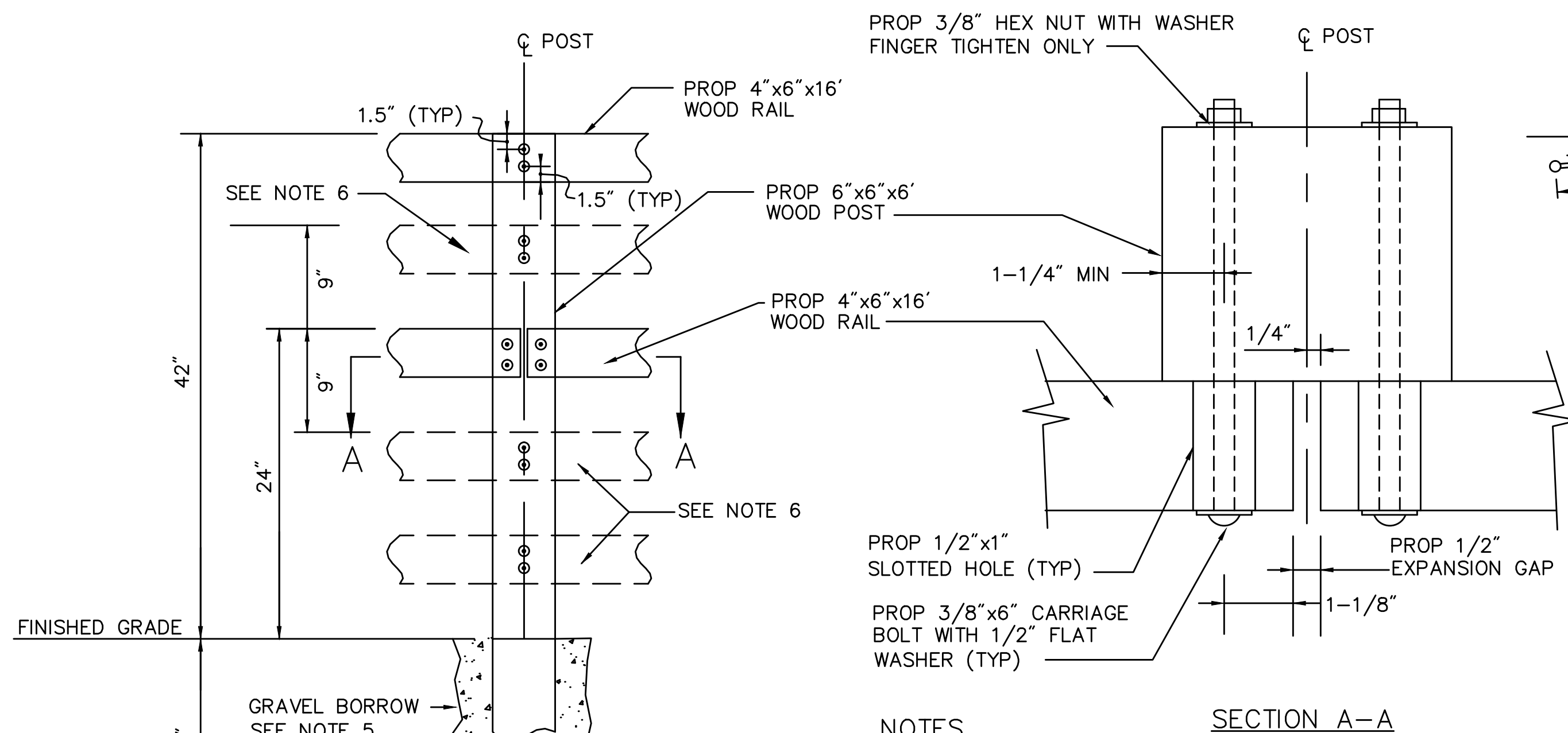
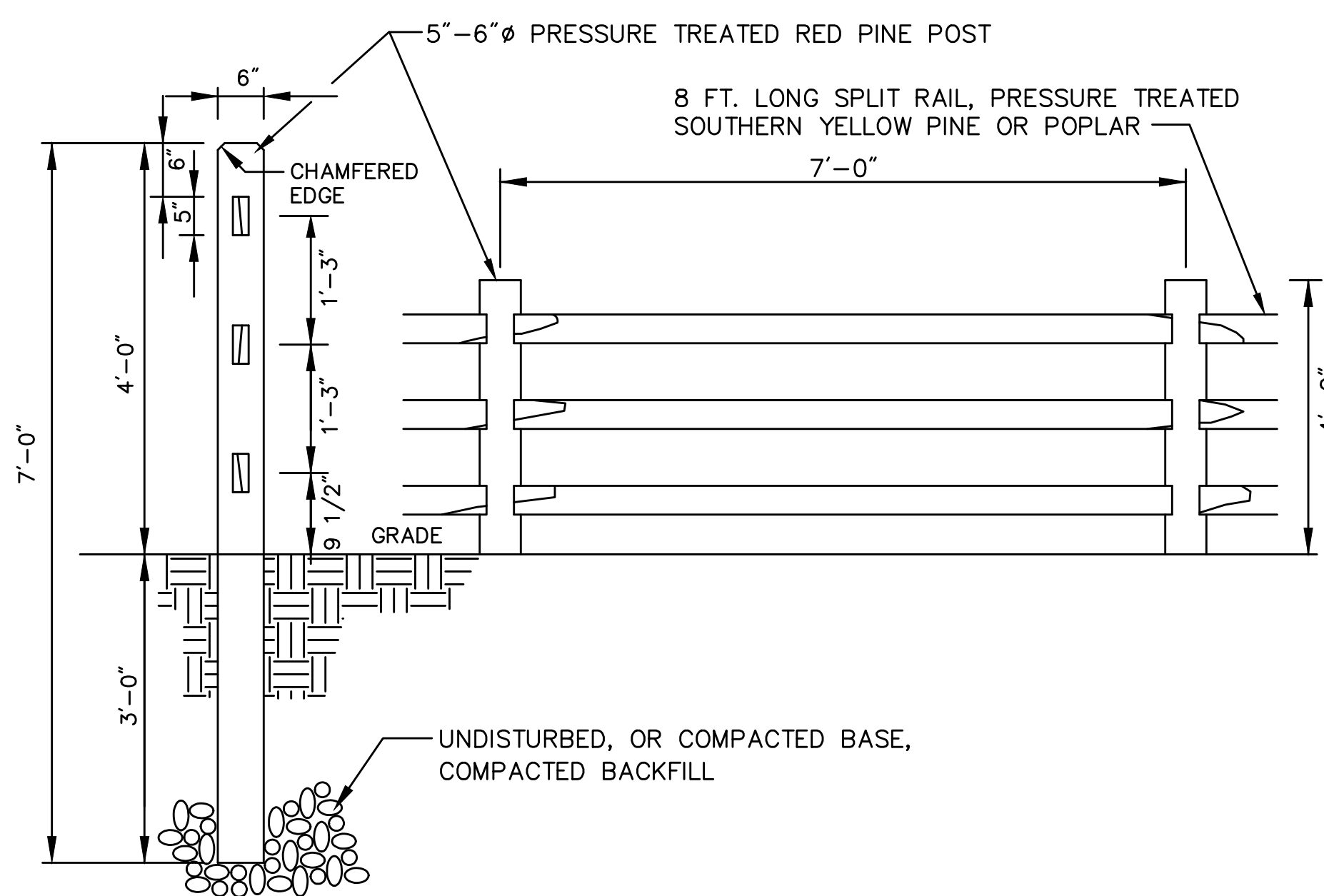
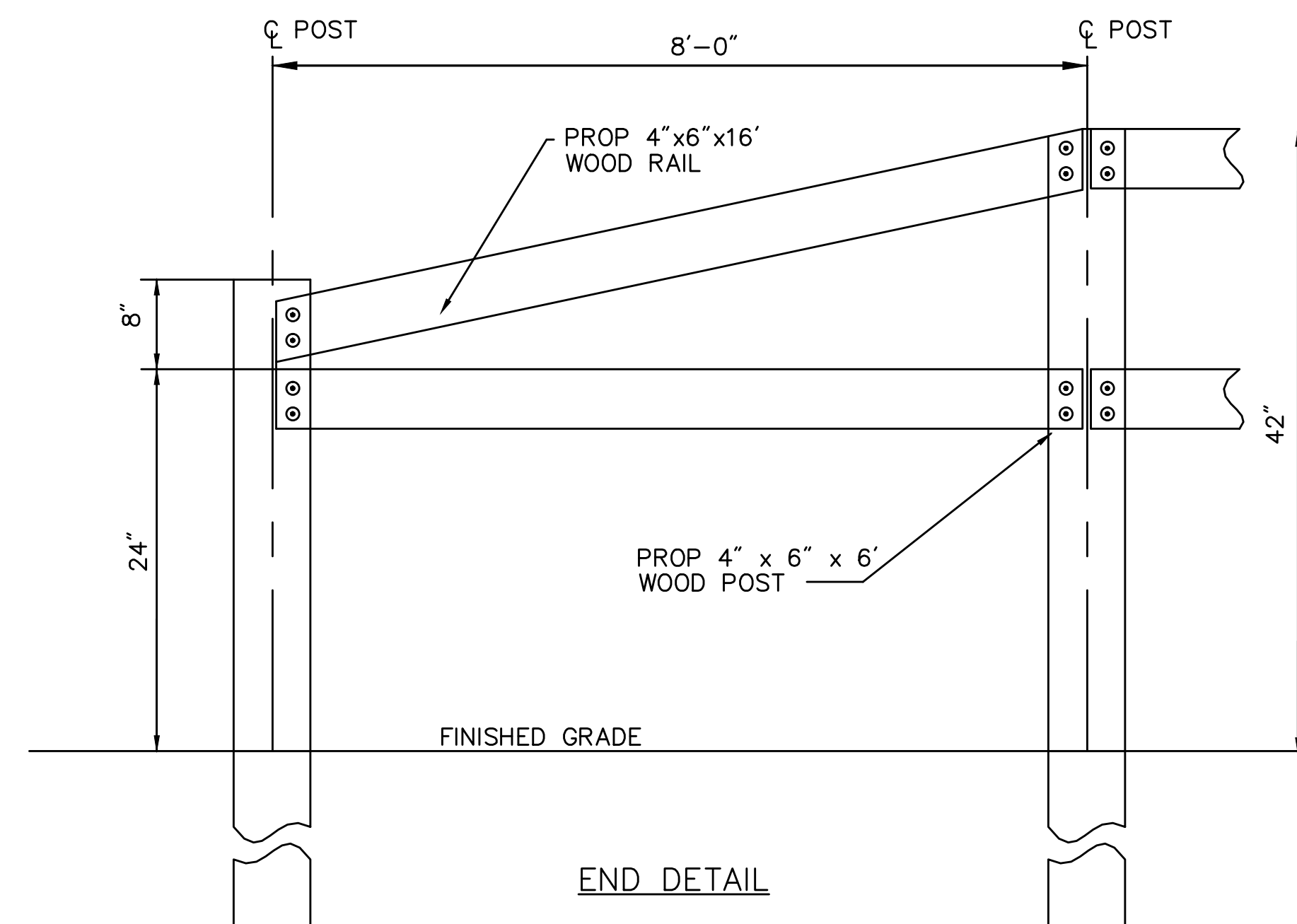
2	RAISED TABLE SECTION	6/22/2015
NO.	REVISION DESCRIPTION	DATE
REVISIONS		







YARMOUTH & DENNIS CAPE COD RAIL TRAIL EXTENSION			
STATE	ED AID	SHEET	TOTAL
MA	MTA		
CONSTRUCTION DETAILS			



- NOTES**
1. POSTS SHALL BE PLACED 8'-0" ON CENTER.
  2. THE FACE OF RAIL SHALL BE SET OFF THE EDGE OF BIKE PATH PAVEMENT, AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE ENGINEER.
  3. ALL HARDWARE SHALL BE GALVANIZED.
  4. ALTERNATE JOINTS IN RAILING BETWEEN POSTS
  5. CONTRACTOR SHALL SET POST IN 4,000 PSI, 1-1/2IN, 565 CEMENT CONCRETE FOR ALL POSTS UNABLE TO BE SET AT REQUIRED DEPTH.
  6. THESE RAILS SHALL ONLY BE INSTALLED BETWEEN POSTS ADJACENT TO RETAINING WALL LOCATIONS APPROACHING PEDESTRIAN BRIDGES

## SPLIT RAIL WOOD FENCE

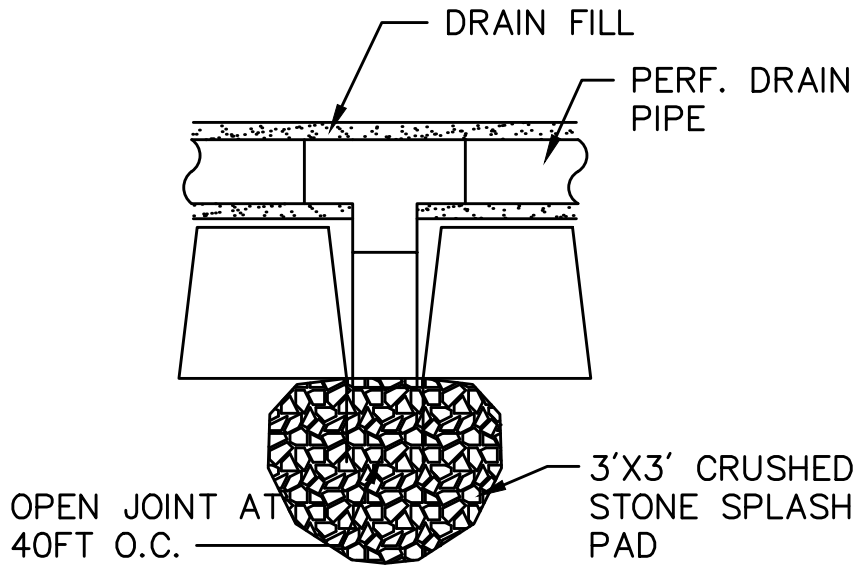
SCALE: NOT TO SCALE  
S-STD.  
H-STD.

## WOOD RAILING

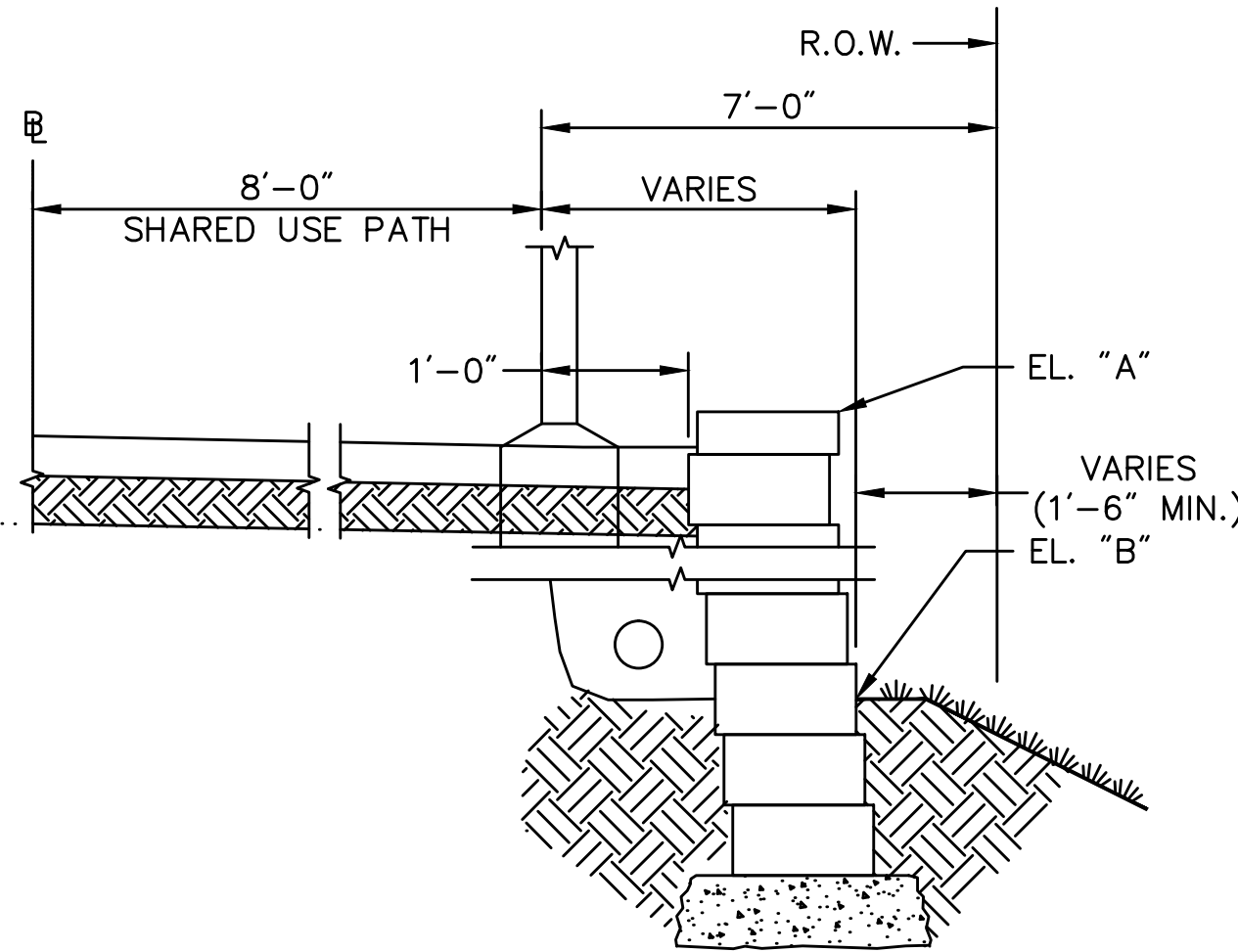
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DATE: APRIL 2003  
DWG: GRD-06



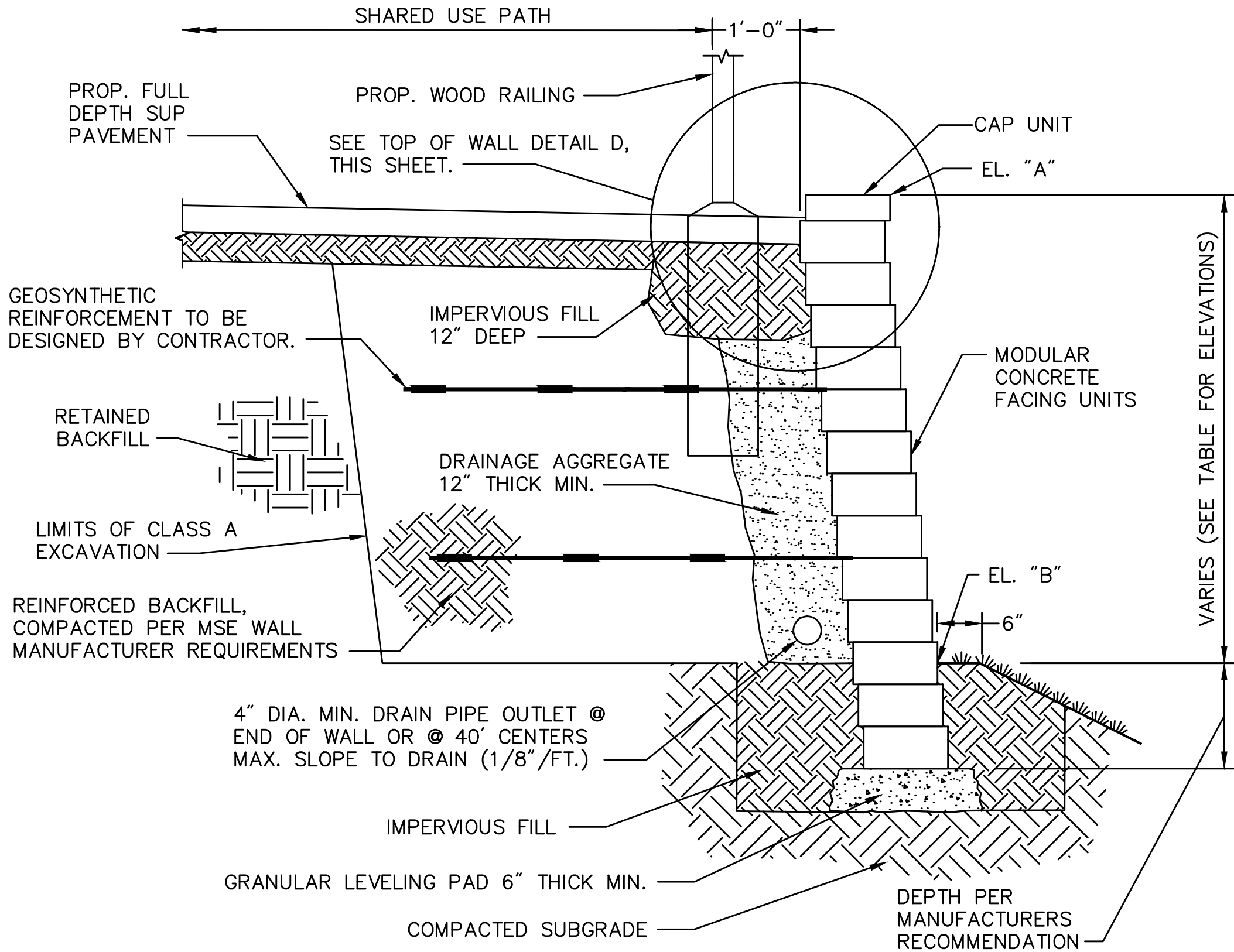




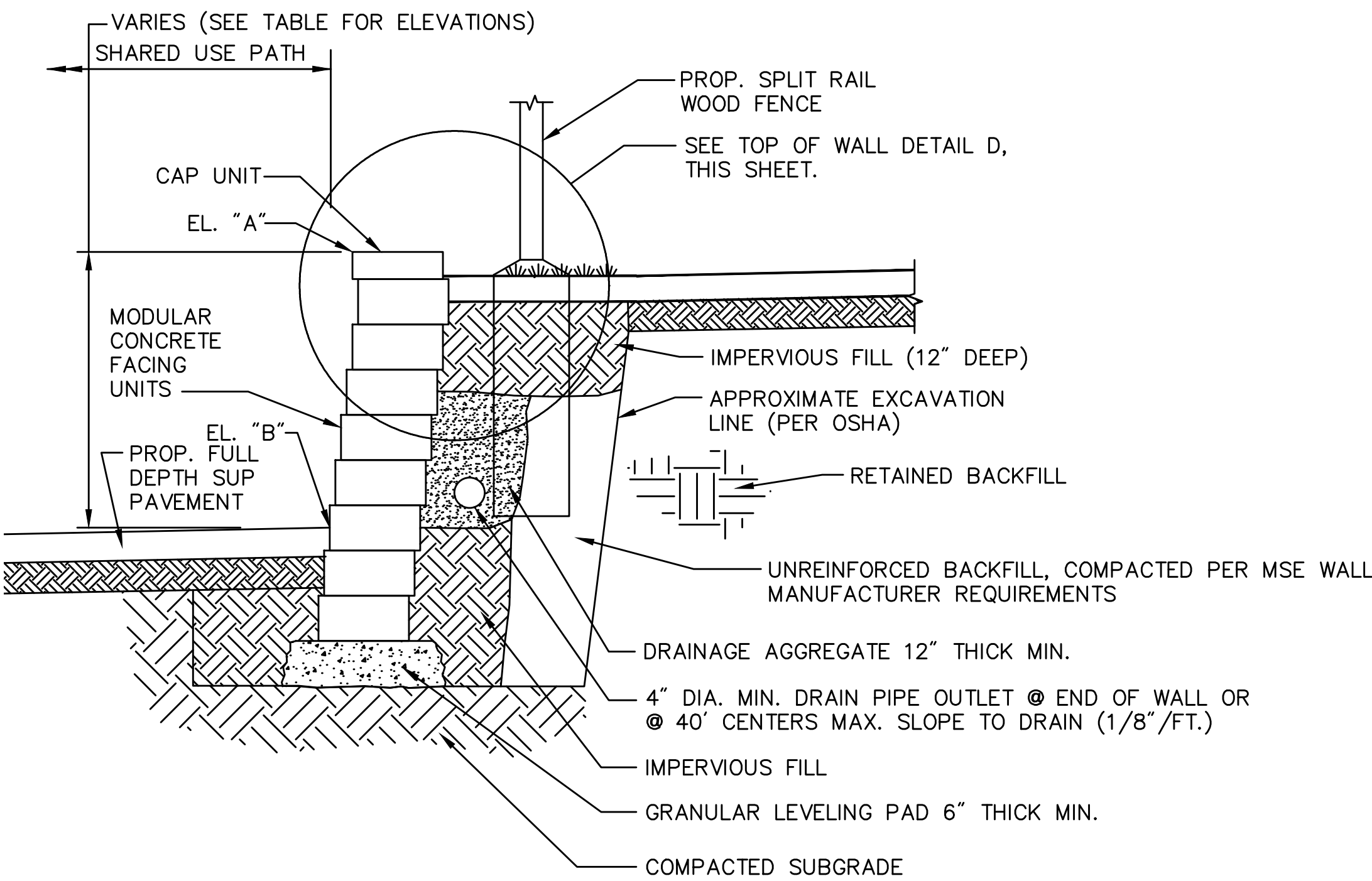
DRAIN DETAIL  
SCALE: 1"= 1'-0"



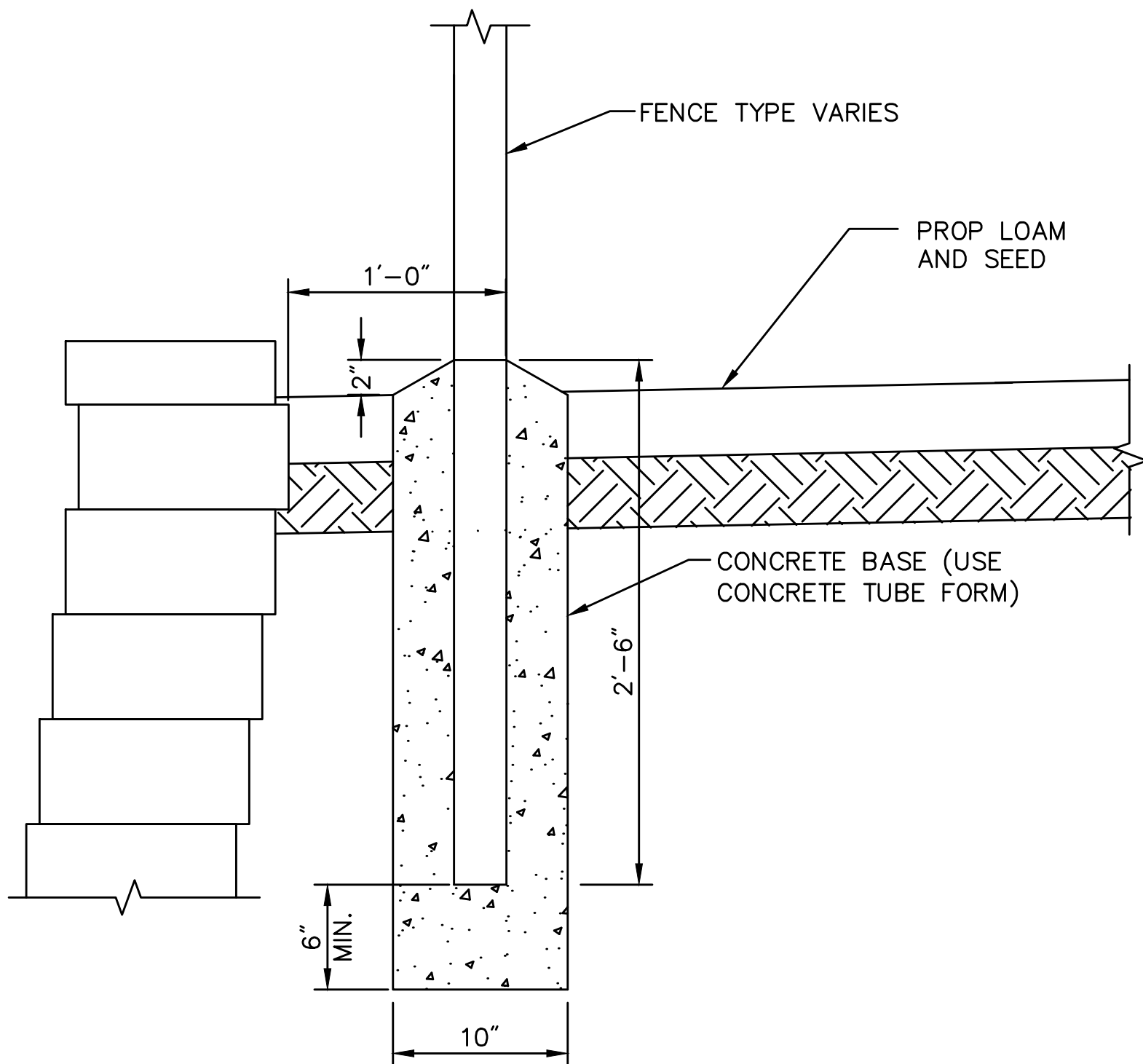
WALL 1: HORIZONTAL CONTROL  
SCALE: 3/4"= 1'-0"



TYPICAL REINFORCED MSE WALL SECTION  
MSE WALL #1 - STA. 149+50 TO 150+50 RIGHT  
MSE WALL #2 - STA. 155+00 TO 156+00 RIGHT  
SCALE: 3/4"= 1'-0"



TYPICAL UNREINFORCED MSE WALL SECTION  
MSE WALL #3 - STA. 239+55 TO 241+30 RIGHT  
SCALE: 3/4"= 1'-0"



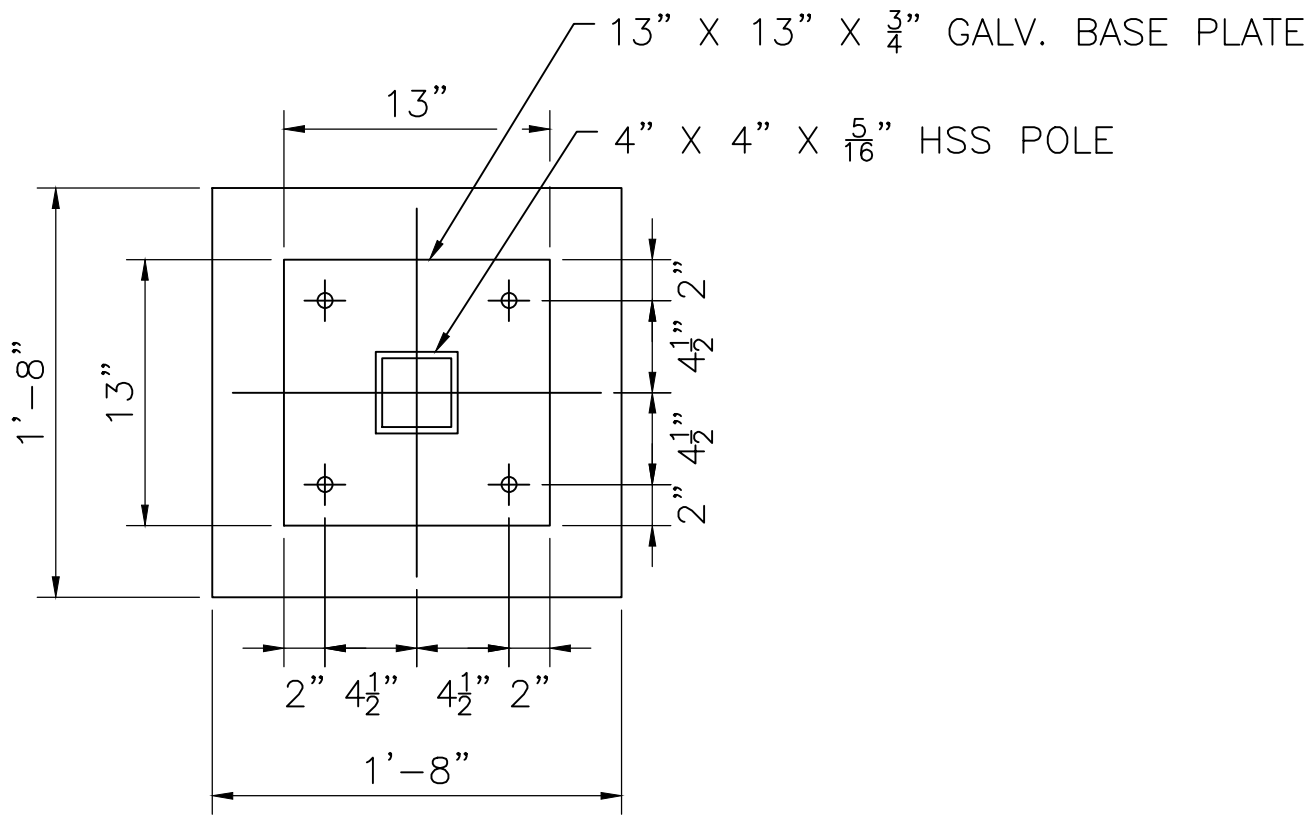
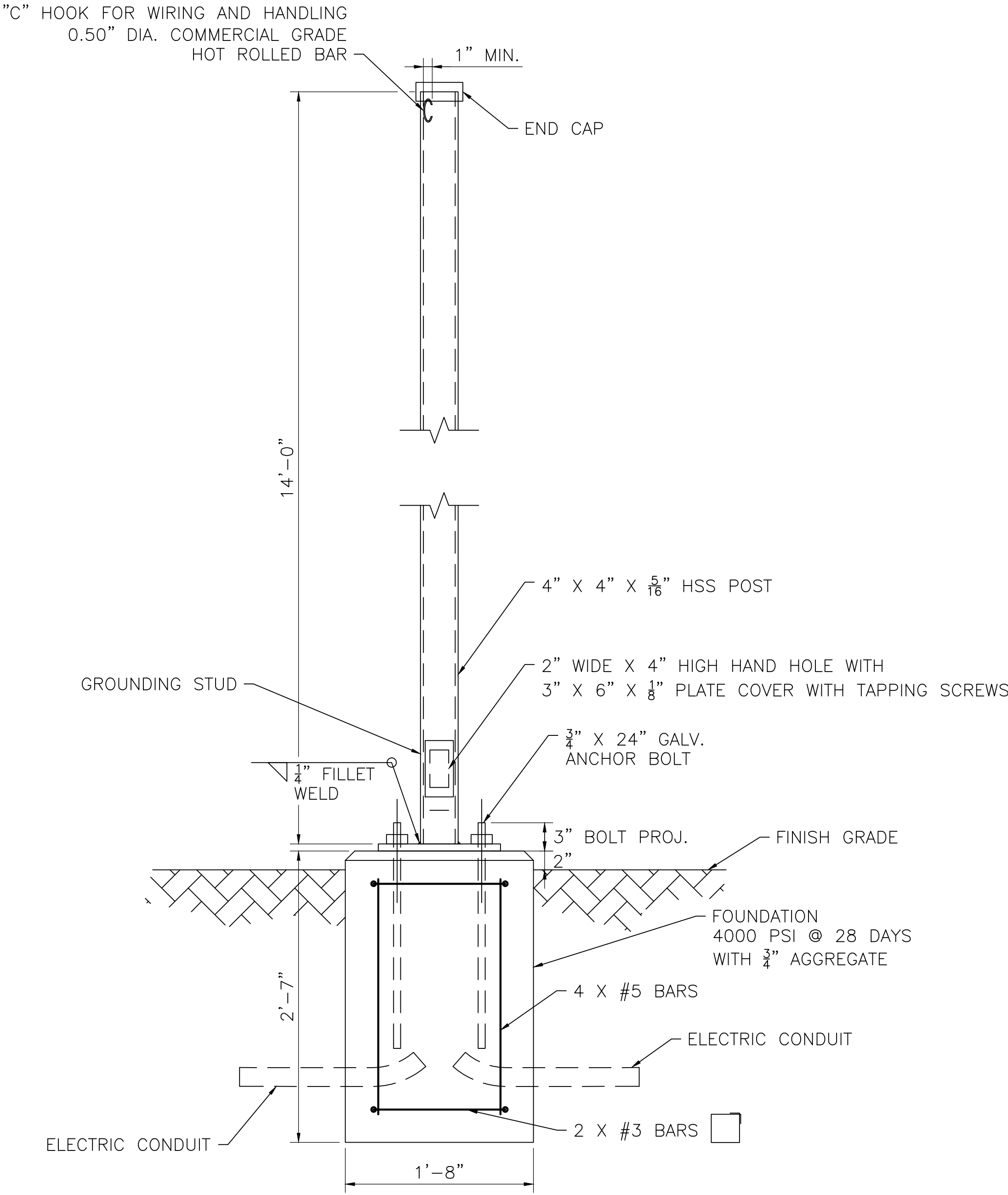
DETAIL D  
SCALE: 1 1/2"= 1'-0"

MECHANICALLY STABILIZED WALL GEOMETRY

STATIONING		EL. "A"	EL. "B"
WALL NO. 1:			
START:	STA. 149+50	50.10	48.19
	STA. 150+00	50.55	47.74
END:	STA. 150+50	50.99	47.13
WALL NO. 2:			
START:	STA. 155+00	53.17	48.09
	STA. 155+50	53.38	48.62
END:	STA. 156+00	53.83	47.63
WALL NO. 3:			
START:	STA. 239+55	27.00	25.00
	STA. 240+00	30.00	25.25
	STA. 240+50	30.00	25.77
	STA. 241+00	30.00	25.74
END:	STA. 241+30	27.50	25.50

NOTES:

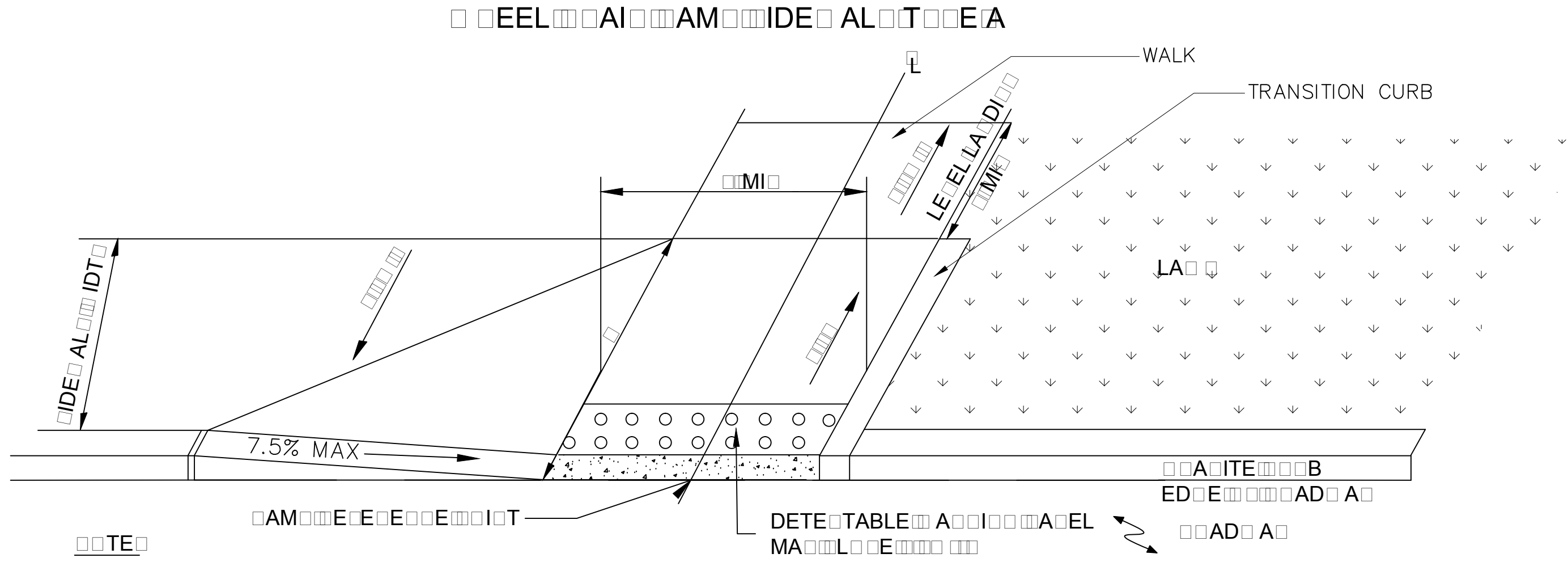
- THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY SUBSURFACE INFORMATION AT THE MSE WALL LOCATIONS. THIS SHALL INCLUDE SOIL BORINGS, TEST PITS, AND GEOTECHNICAL RECOMMENDATIONS, AS REQUIRED, TO THE SATISFACTION OF THE ENGINEER.
- MSE WALLS AND LEVELING PADS SHALL BE DESIGNED BY THE CONTRACTOR ACCORDING TO THE CONFIGURATION AND ELEVATIONS SHOWN ON THE PLANS, AND IN ACCORDANCE WITH AASHTO AND MASSDOT REQUIREMENTS. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS STAMPED BY A PROFESSIONAL ENGINEER (STRUCTURAL) REGISTERED IN THE COMMONWEALTH OF MASSACHUSETTS, TO THE ENGINEER FOR APPROVAL. IN ADDITION, CONTRACTOR SHALL SUBMIT TO THE ENGINEER ALL SUBSURFACE SOIL INFORMATION.



POST SUPPORT DETAIL FOR RRFB  
NOT TO SCALE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/TI-002S(758)X	77	185
PROJECT FILE NO. 604488			

CONSTRUCTION DETAILS



- \* CONSTRUCTION TOLERANCE  $\pm 0.5\%$

SEE TYPICAL DETAILS FOR RAMP DATA

SEE TYPICAL DETAILS FOR RAMP DATA

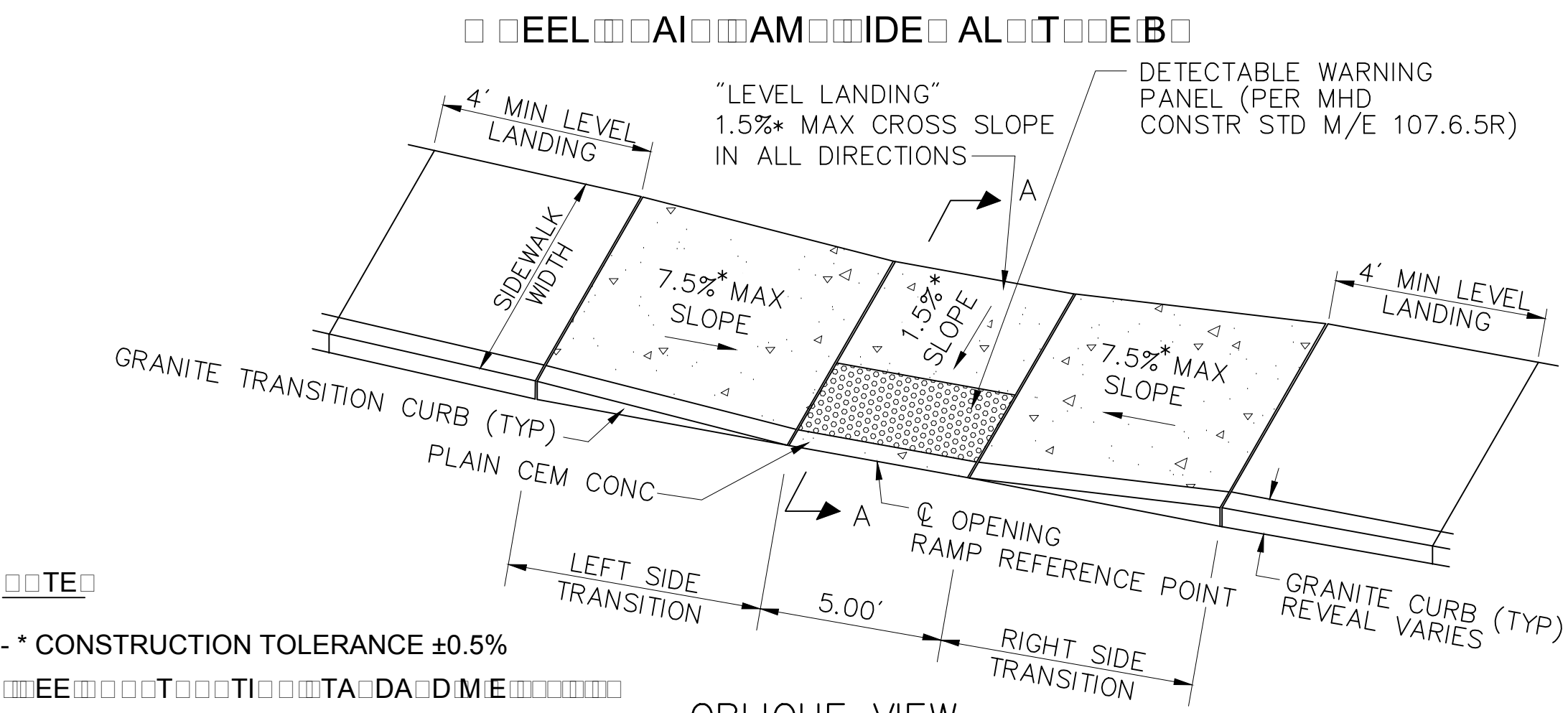
SEE TYPICAL DETAILS FOR RAMP DATA

* TOLERANCE FOR CONSTRUCTION ±0.5%												
WHEELCHAIR RAMP TYPE A DATA												
NO.	LOCATION	SIDEWALK WIDTH	LEFT SIDE			RIGHT SIDE			C/O OPENING ELEVATION	LEVEL LANDING	RAMP LENGTH	
			ROADWAY GUTTER	REVEAL	TRANS	ROADWAY GUTTER	REVEAL	TRANS				
12	174+63.19 57.25' RT	10'	+2%	6"	9'-0"	-1.5%	6"	6'-6"	51.87	4 FT	6'-7"	

NOTE: NEGATIVE (-) ROADWAY GUTTER SLOPE DENOTES A LOW SIDE TRANSITION.

WHEELCHAIR RAMP TYPE B DATA													
TYP.	NO.	LOCATION	SIDEWALK WIDTH	LEFT SIDE			RIGHT SIDE			C/O OPENING ELEVATION	LEVEL LANDING	RAMP LENGTH L	RAMP LENGTH R
				ROADWAY GUTTER	REVEAL	TRANS	ROADWAY GUTTER	REVEAL	TRANS				
B1	10	167+96.95 71.28' RT	5.5'	-0.5%	6"	7'-8"	-2%	6"	9'-0"	56.08	4 FT	7'-8"	9'-0"
B2	11	167+07.58 100.35' RT	5.5'	-0.7%	6"	6'-7"	-1.3%	6"	9'-0"	55.32	4 FT	N/A	9'-0"
B1	13	312+37.21 25.84' RT	6.0'	+2.1%	6"	11'-0"	-1.2%	6"	9'-0"	30.16	4 FT	11'-0"	9'-0"
B2	14	327+60.33 29.96' RT	6.0'	-0.1%	6"	9'-0"	+1.8%	6"	6'-6"	39.96	4 FT	9'-0"	N/A

NOTE: NEGATIVE (-) ROADWAY GUTTER SLOPE DENOTES A LOW SIDE TRANSITION.

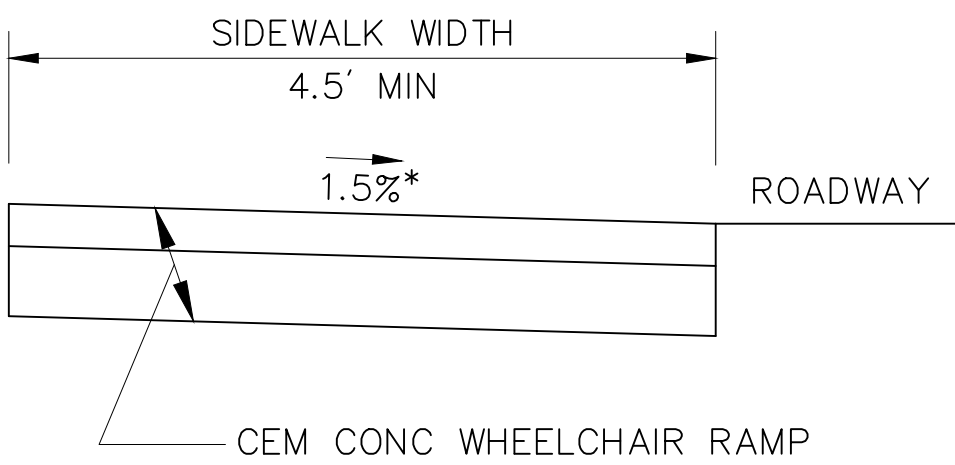


- \* CONSTRUCTION TOLERANCE  $\pm 0.5\%$

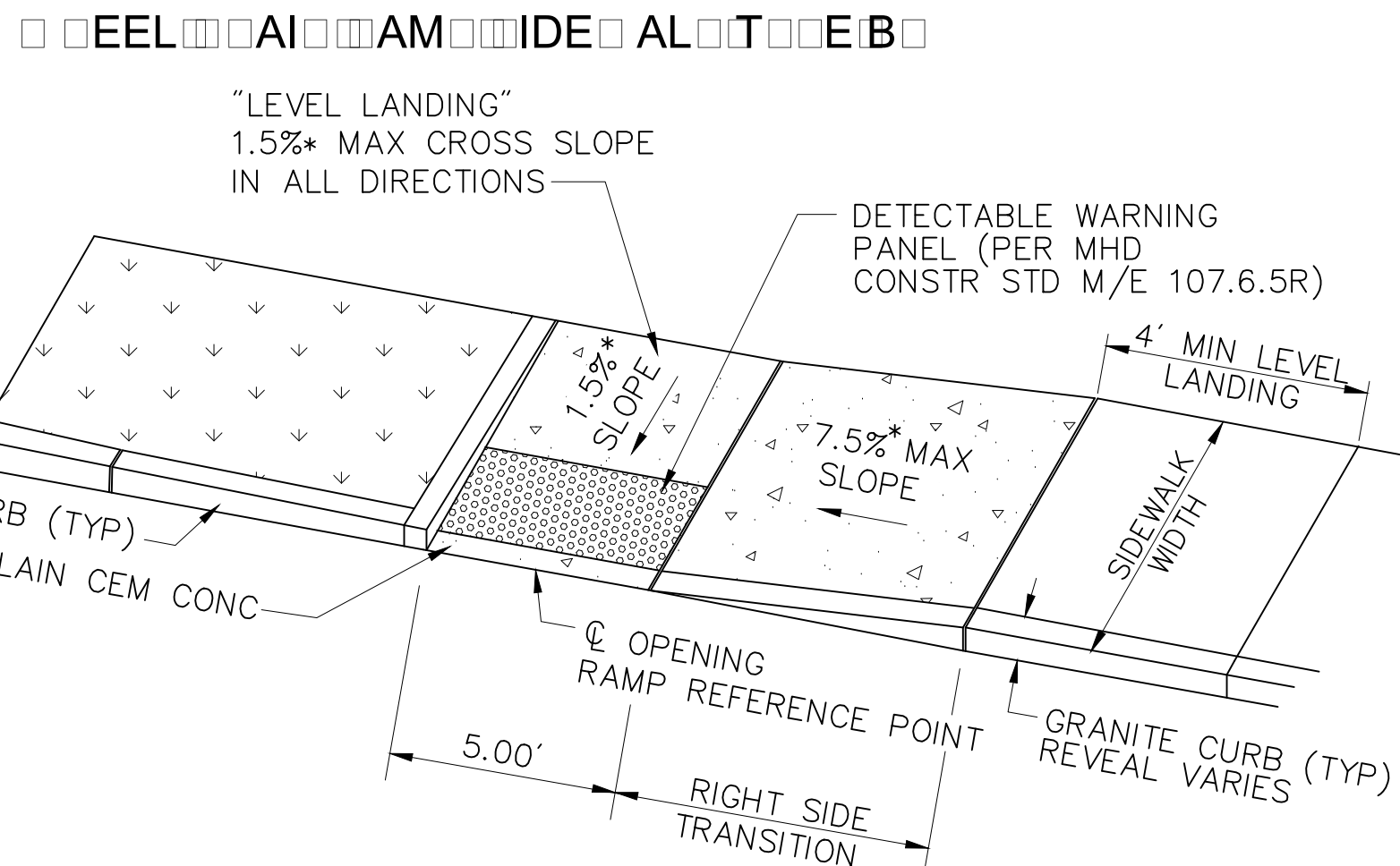
SEE TYPICAL DETAILS FOR RAMP DATA

SEE TYPICAL DETAILS FOR RAMP DATA

SEE TYPICAL DETAILS FOR RAMP DATA



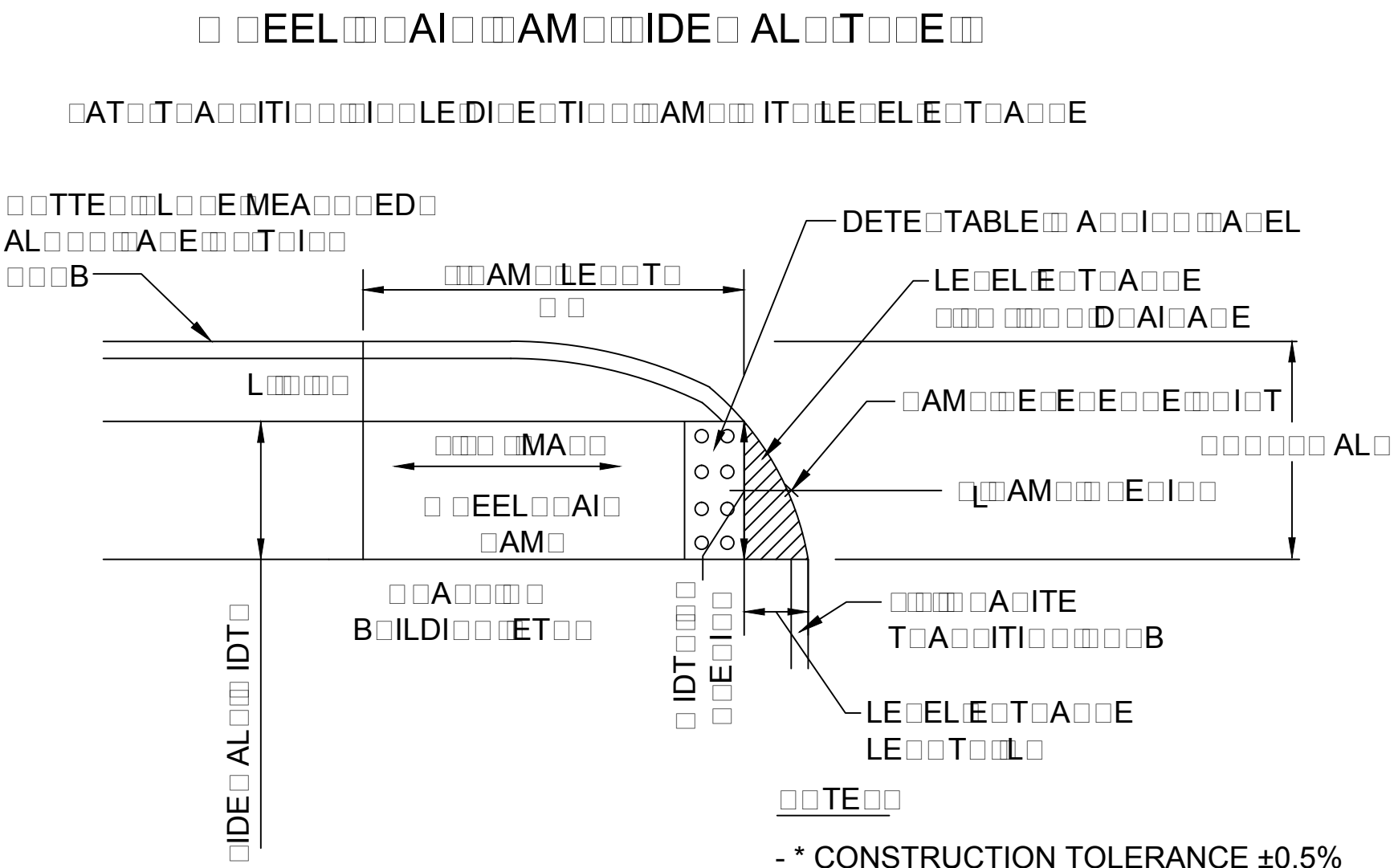
SECTION A-A



OBLIQUE VIEW

* TOLERANCE FOR CONSTRUCTION ±0.5%											
WHEELCHAIR RAMP TYPE C DATA											
NO.	LOCATION	SIDEWALK WIDTH	LEFT SIDE			RIGHT SIDE			C/O OPENING ELEVATION	LEVEL LANDING	RAMP LENGTH
			ROADWAY GUTTER	REVEAL	TRANS	ROADWAY GUTTER	REVEAL	TRANS			
15	312+37.21 25.84' RT	6'	+2%	6"	11'-0"	-0.2%	6"	6'-6"	39.90	4 FT	6'-7"

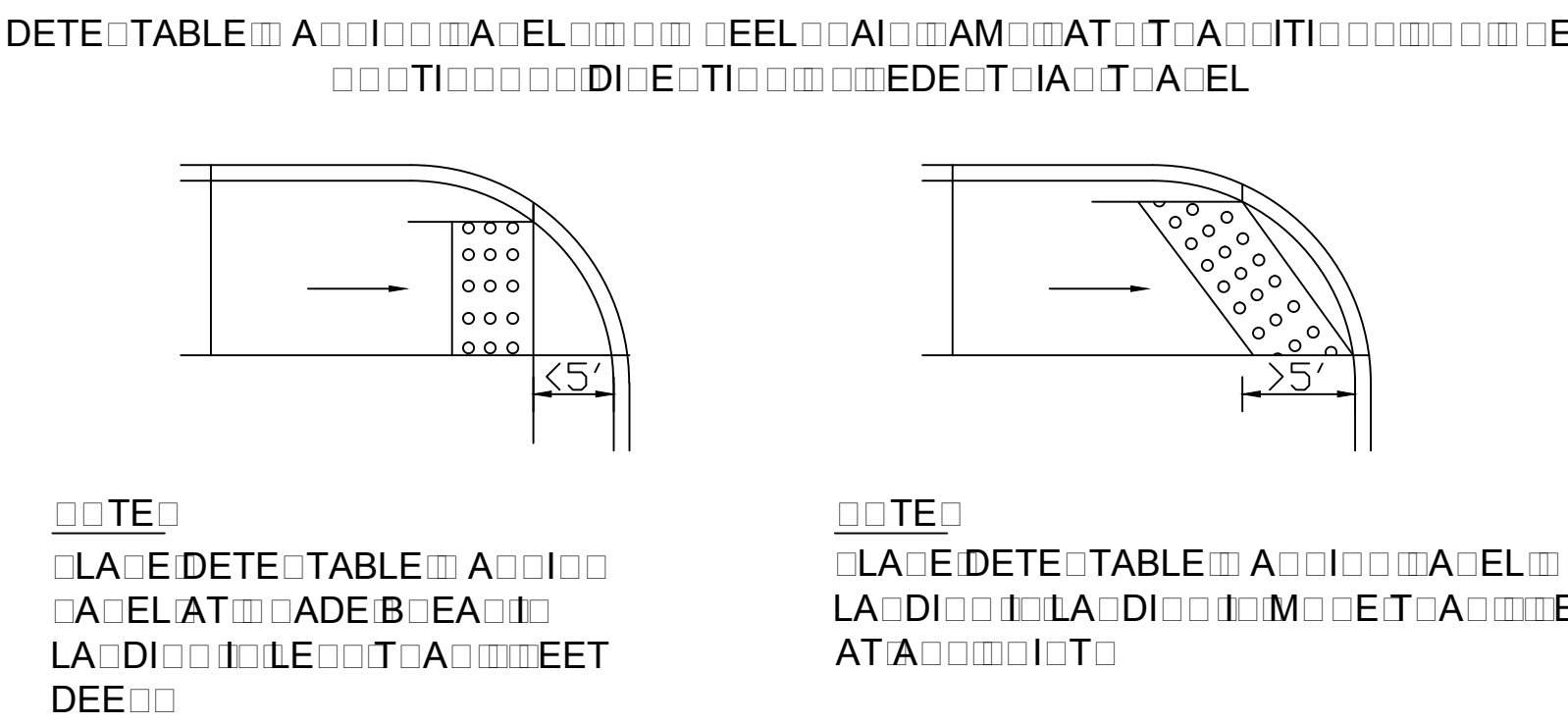
NOTE: NEGATIVE (-) ROADWAY GUTTER SLOPE DENOTES A LOW SIDE TRANSITION.



- \* CONSTRUCTION TOLERANCE  $\pm 0.5\%$

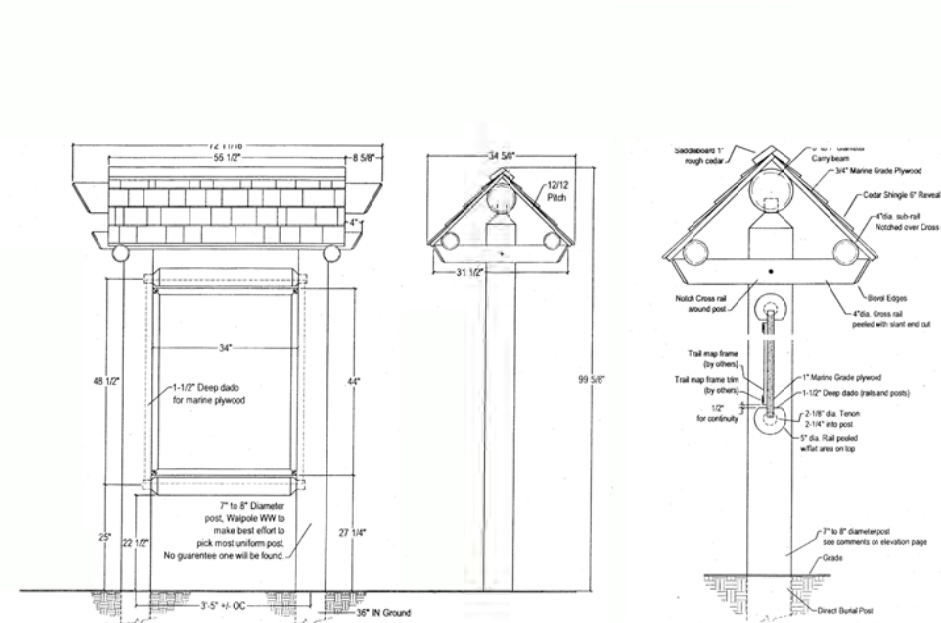
SEE TYPICAL DETAILS FOR RAMP DATA

SEE TYPICAL DETAILS FOR RAMP DATA

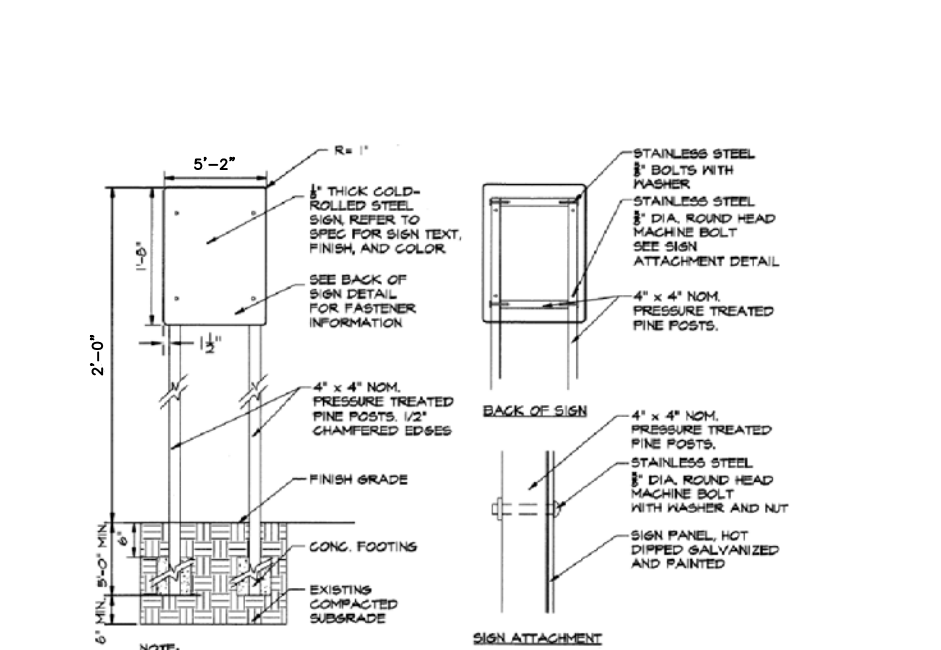


SEE TYPICAL DETAILS FOR RAMP DATA

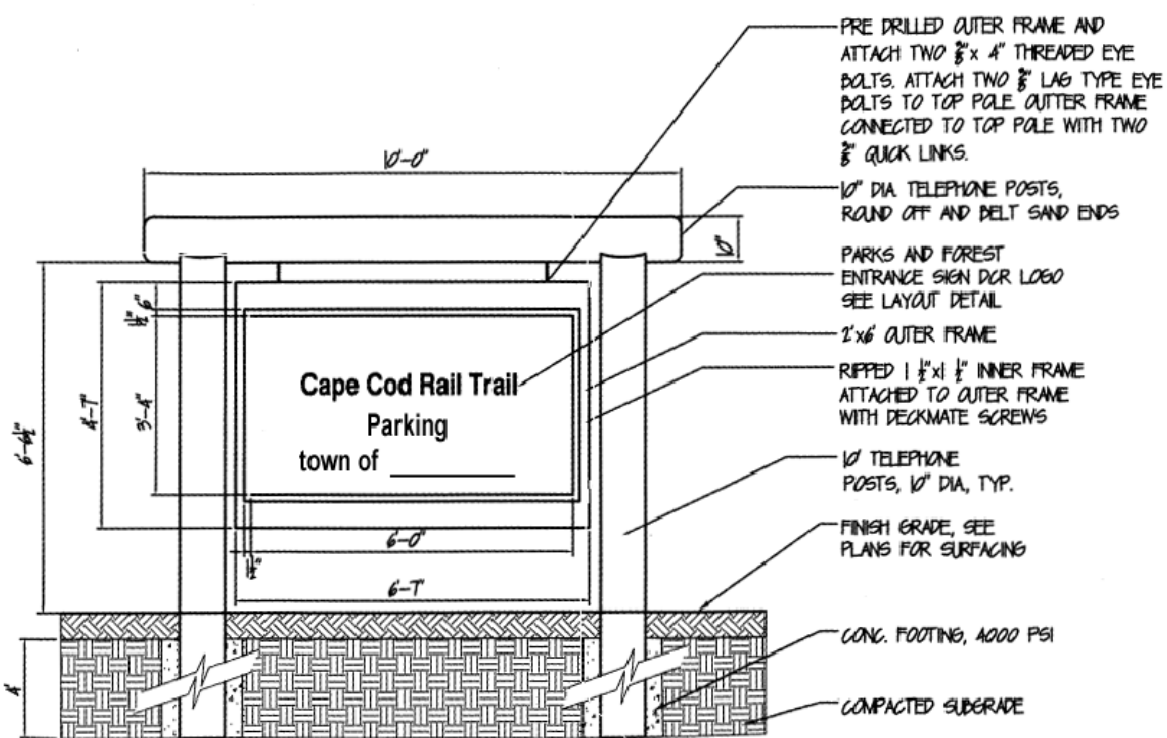




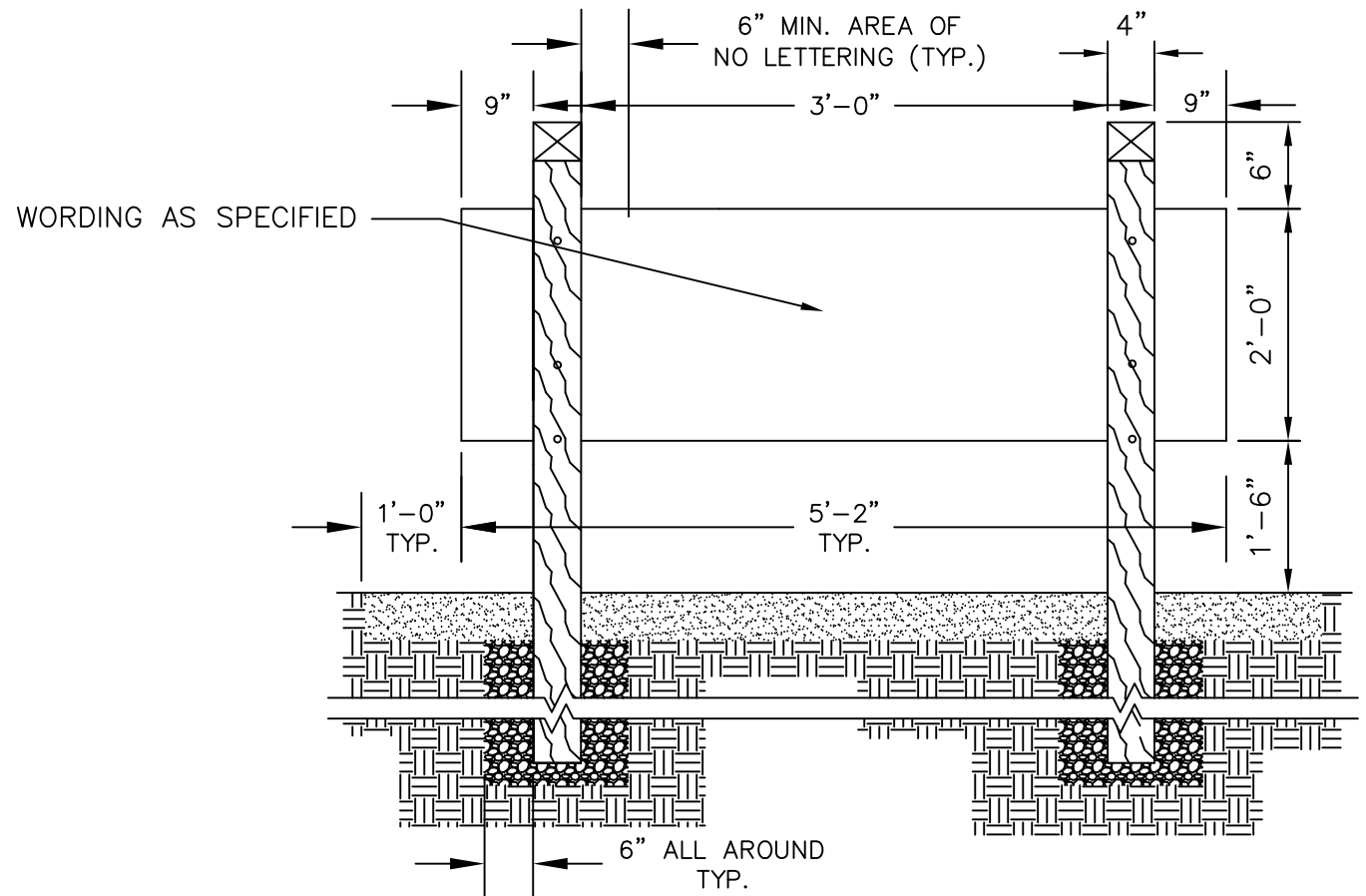
MESSAGE BOARD KIOSK  
NOT TO SCALE



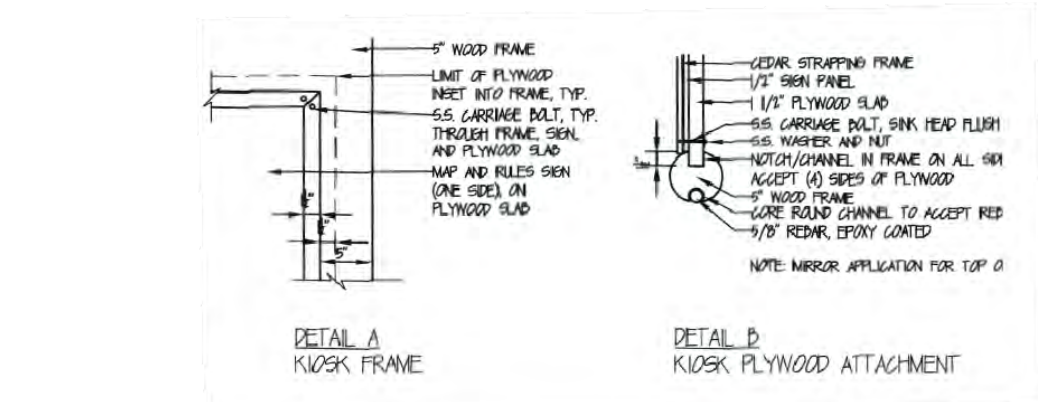
PARKING AREA IDENTIFIER SIGN SP-2A,B & C  
NOT TO SCALE



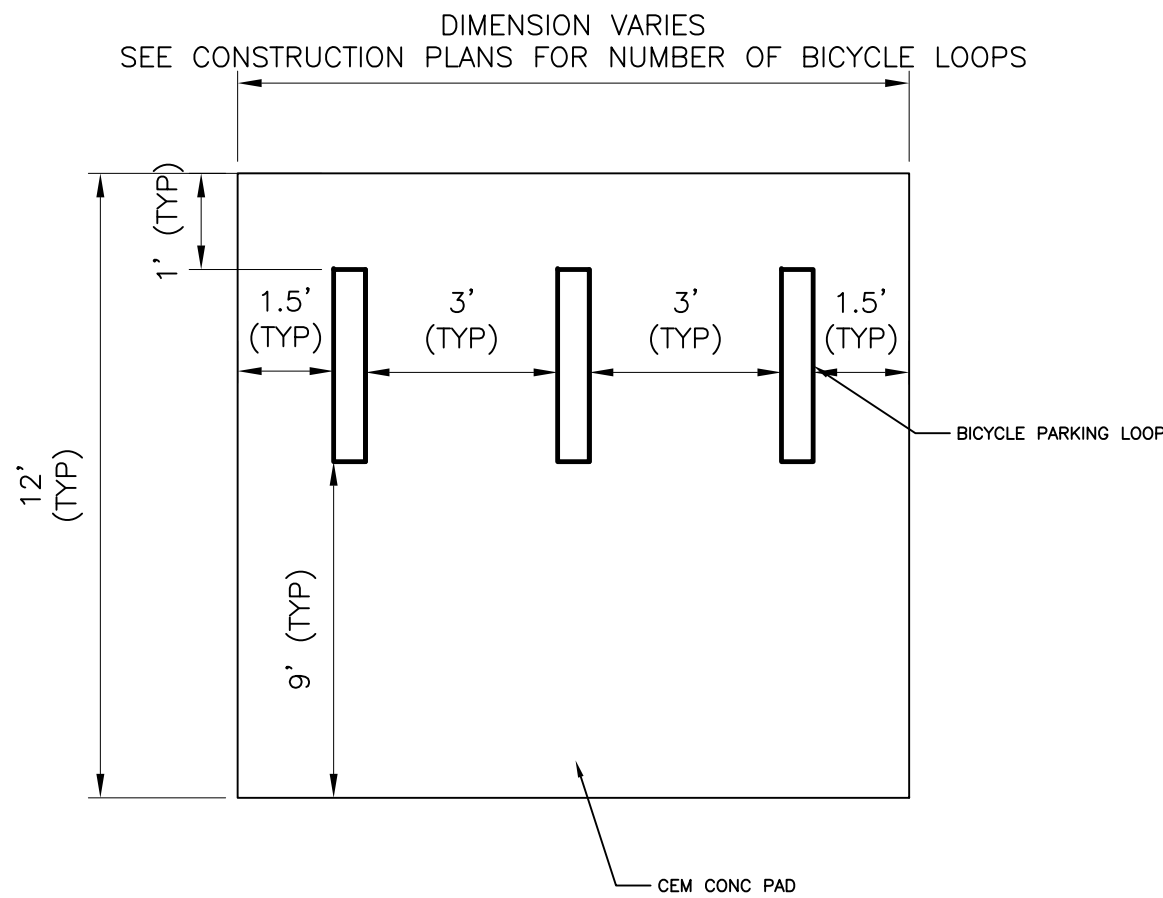
MAIN ENTRANCE SIGN (CCRT IDENTIFIER) SP-1A  
NOT TO SCALE



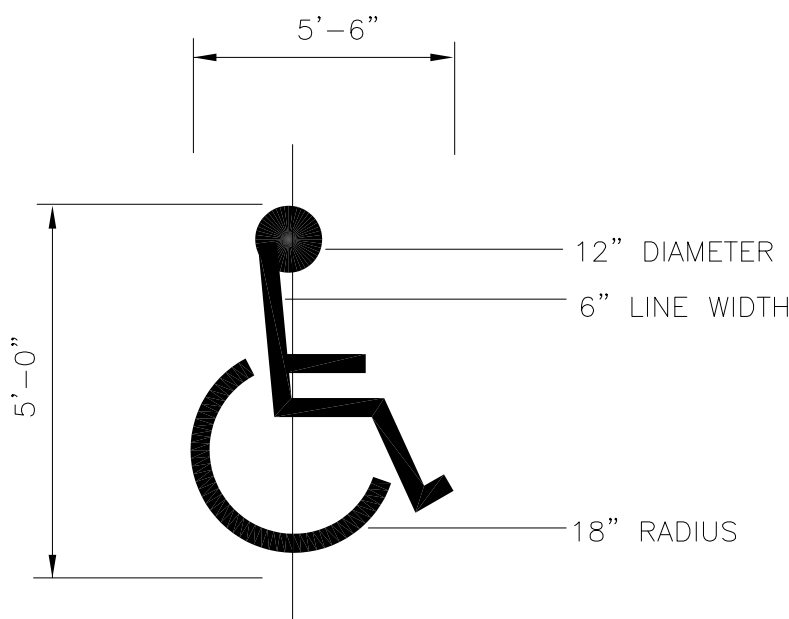
DIRECTIONAL SIGN (SP-2A,B, AND C)  
NOT TO SCALE



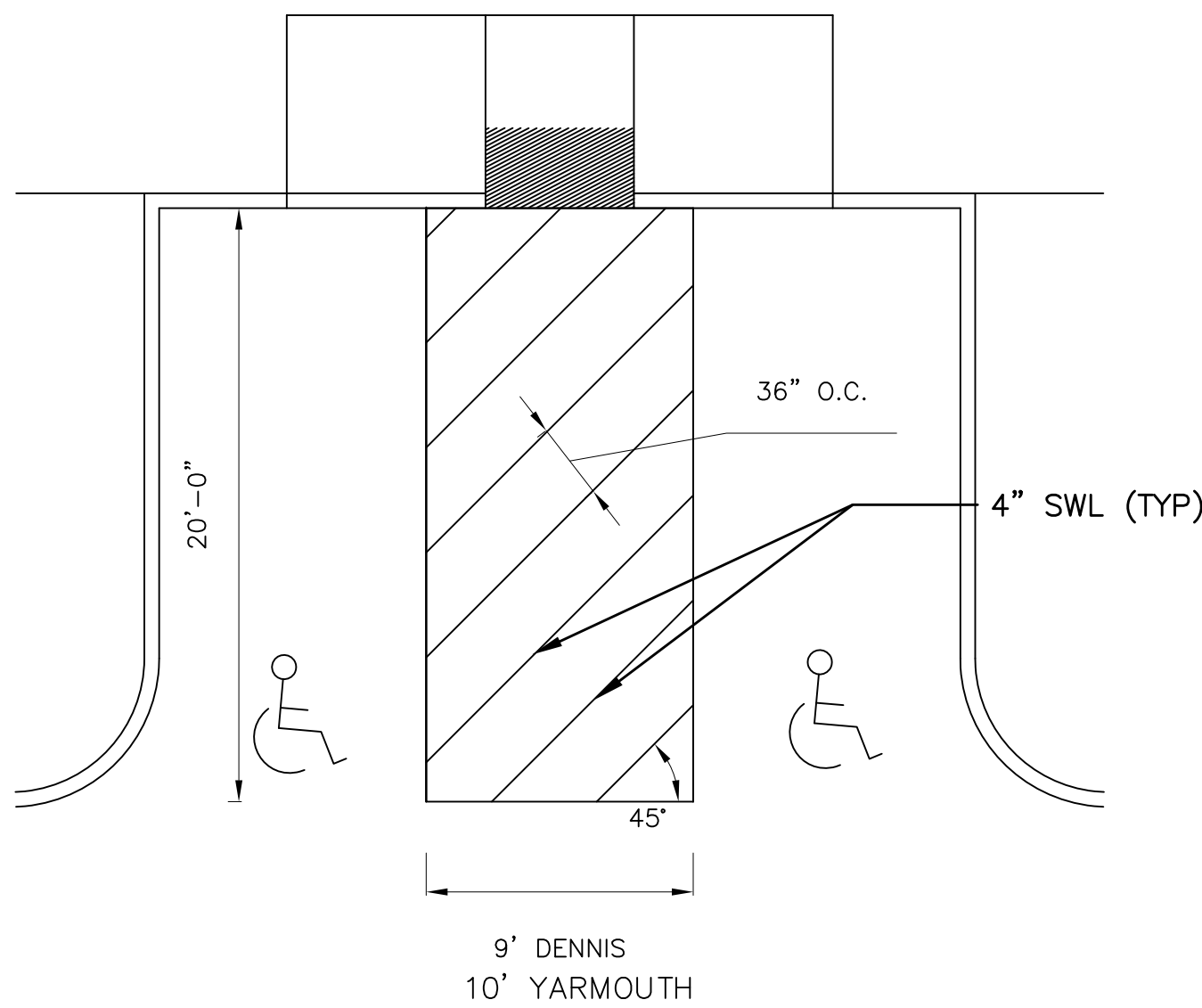
NOTE: MESSAGE BOARD MAP SIGN TO BE PRINTED DOUBLE SIDED



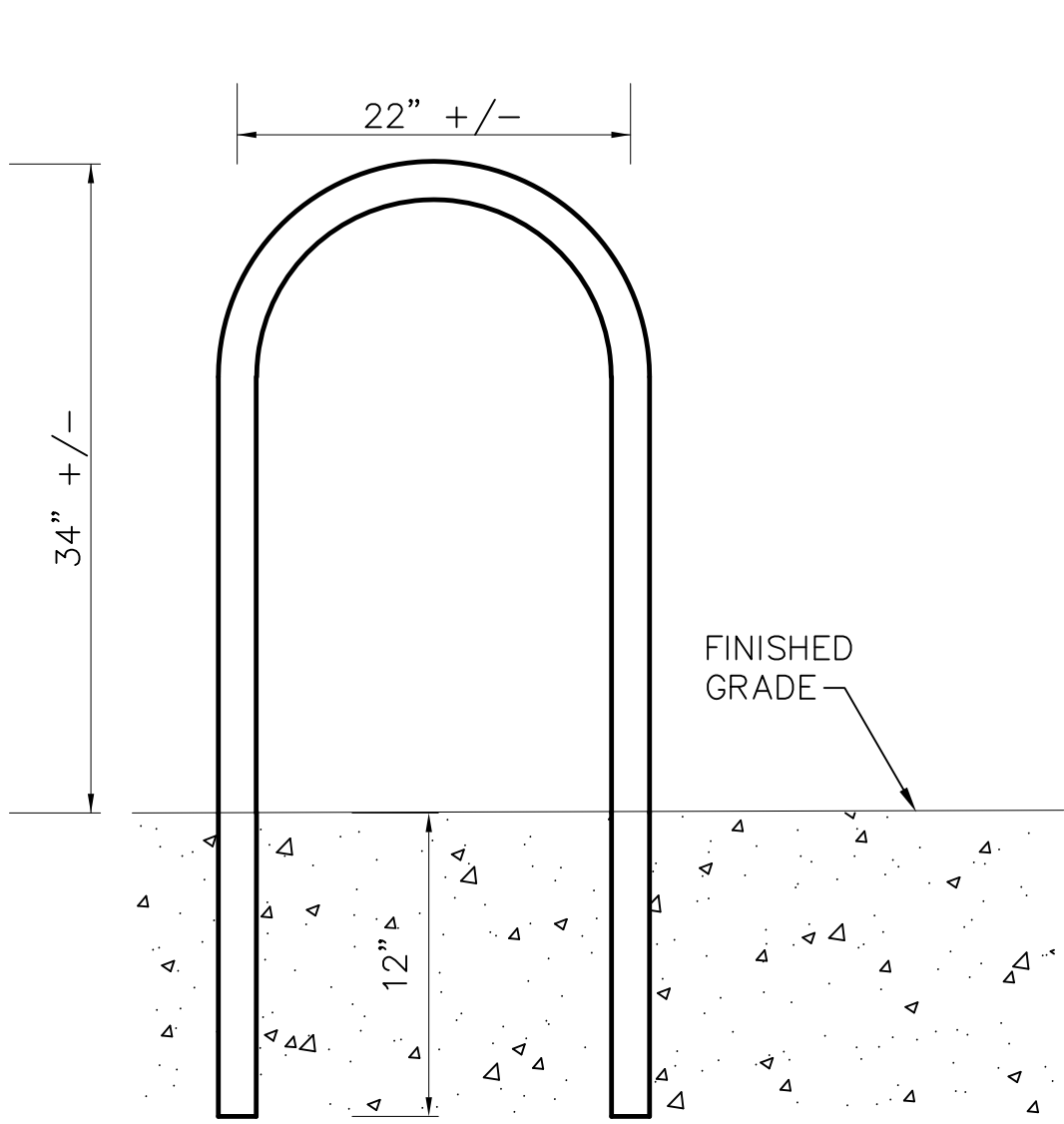
U-SHAPED BICYCLE RACK  
NOT TO SCALE



HANDICAP PAVEMENT SYMBOL  
NOT TO SCALE

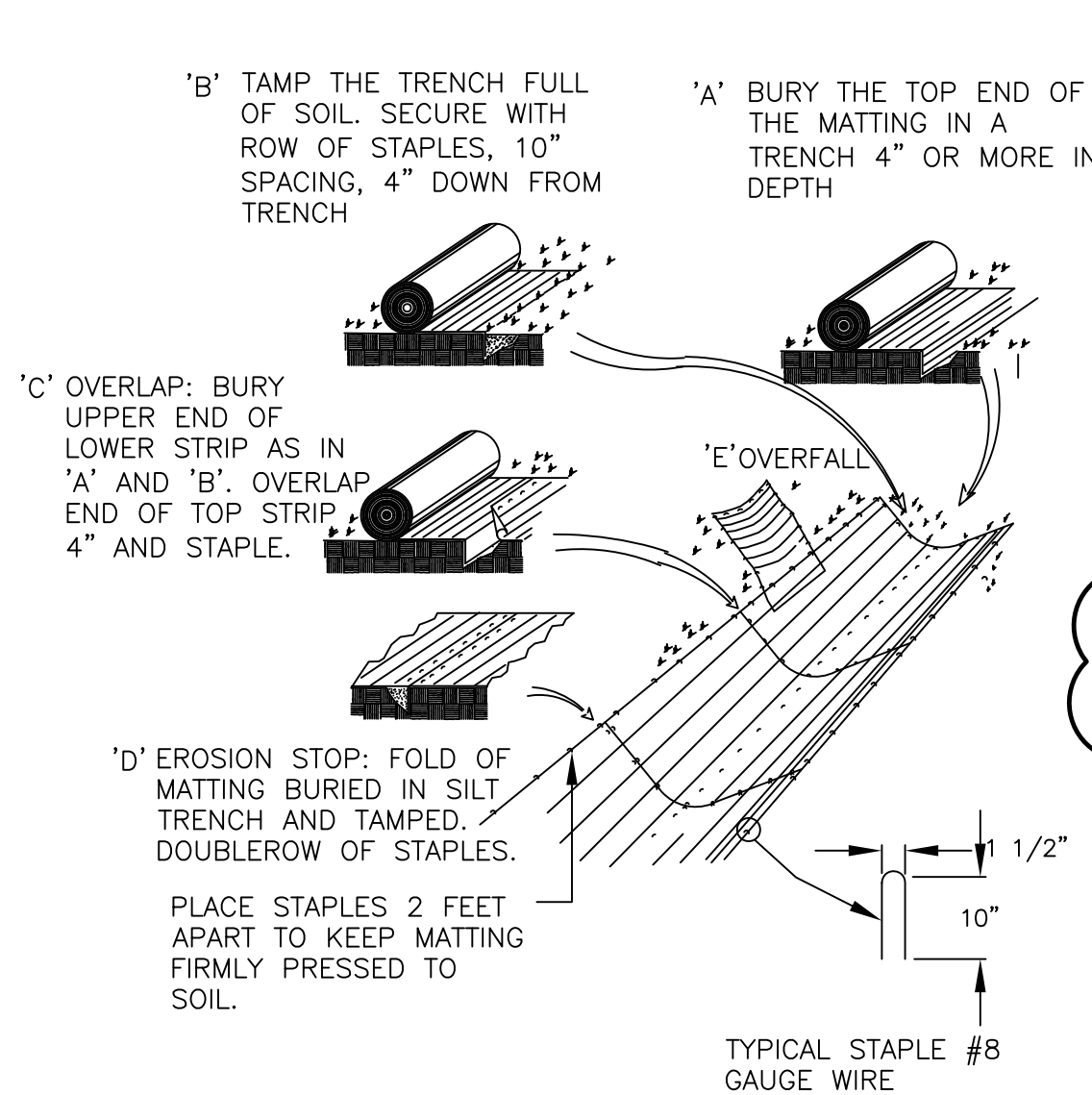


ACCESSIBLE PAVEMENT MARKINGS  
NOT TO SCALE

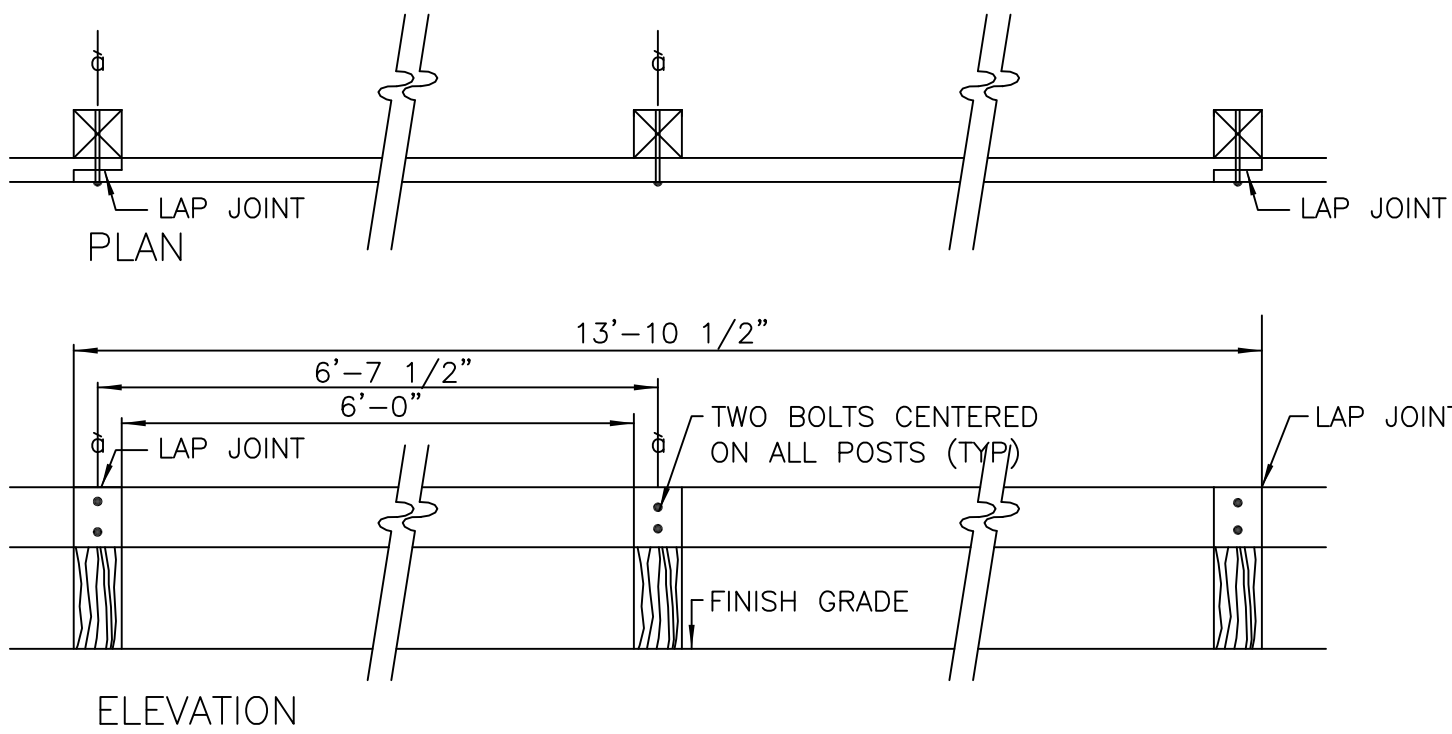


NOTES:

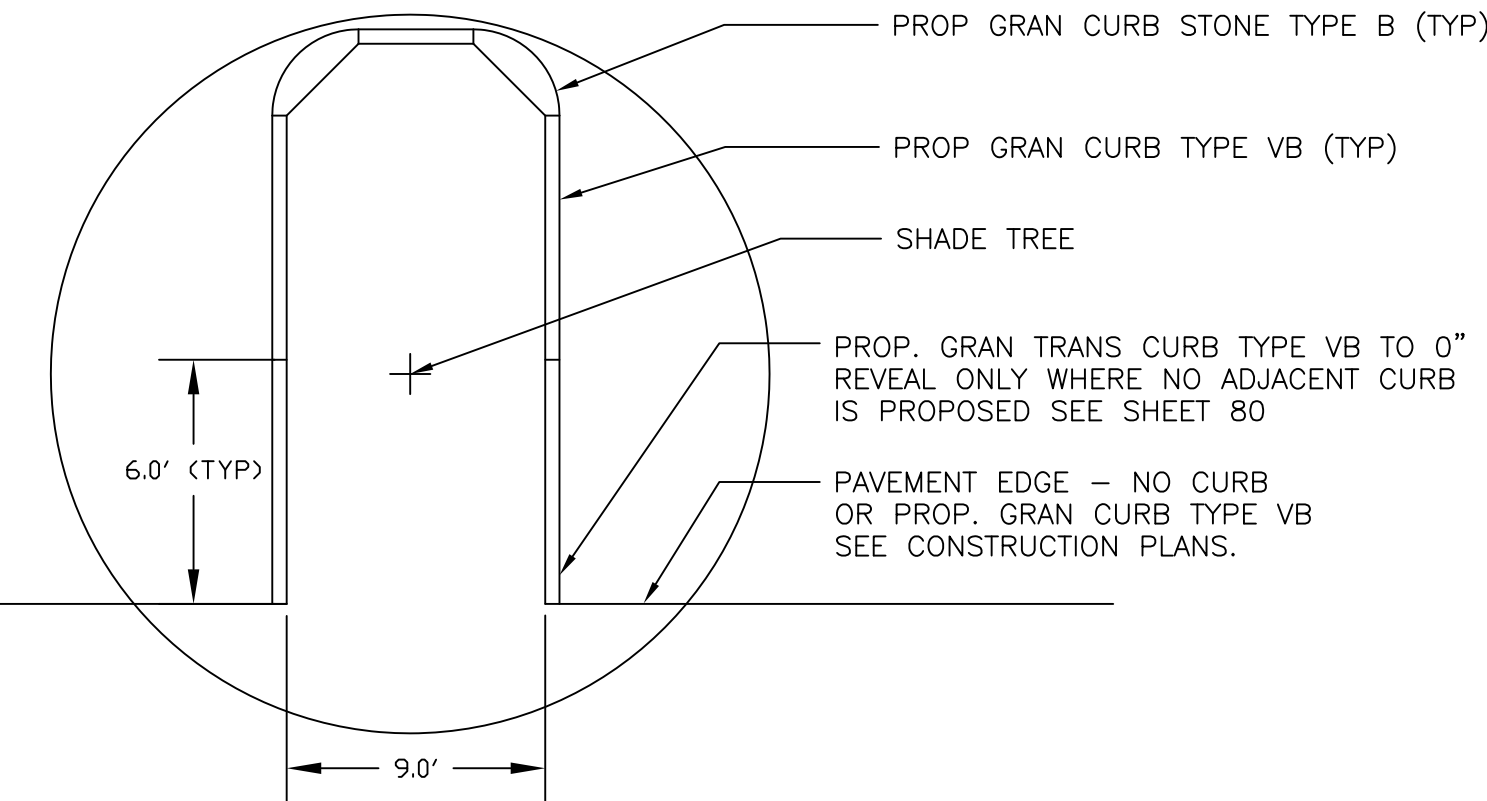
1. BICYCLE RACK UNITS SHALL CONSIST OF INVERTED "U" PIPES
2. 2IN NOM SCHED 40, ASTMA 500 WELDED SEAMLESS STEEL PIPE CONSTRUCTION
3. INVERTED "U" PIPES SHALL BE PLACED PARALLEL TO EACH OTHER 36-INCHES
4. CONCRETE SHALL BE 4000 PSI, 3/4IN, 565 CEMENT CONCRETE



MATting FOR EROSION CONTROL  
NOT TO SCALE



WOOD GUARD RAIL AT STATION 174+75 - 174+90  
NOT TO SCALE



CURBED ISLAND PLANTING  
NOT TO SCALE

YARMOUTH & DENNIS CAPE COD RAIL TRAIL EXTENSION			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/TH-002S(758)X	78	185
PROJECT FILE NO. 604488			

CONSTRUCTION DETAILS

NOTE:

1. INSTALL MATTING FOR EROSION CONTROL IN ALL CHANNELS, SWALES AND ON ALL SLOPES GRATER THAN 3(HORIZONTAL):1(VERTICAL)

REVISIONS		
NO.	REVISION DESCRIPTION	DATE
2	NOTE REVISION	6/23/2015

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MASS.	CM/TAP/PI-002S(758)X	79	185
PROJECT FILE NO. 604488			

5'

STONE FOR PIPE ENDS (M2.O2.3)

FLARED END SECTION

SLOPE

3'-0"

RCP

PLAN

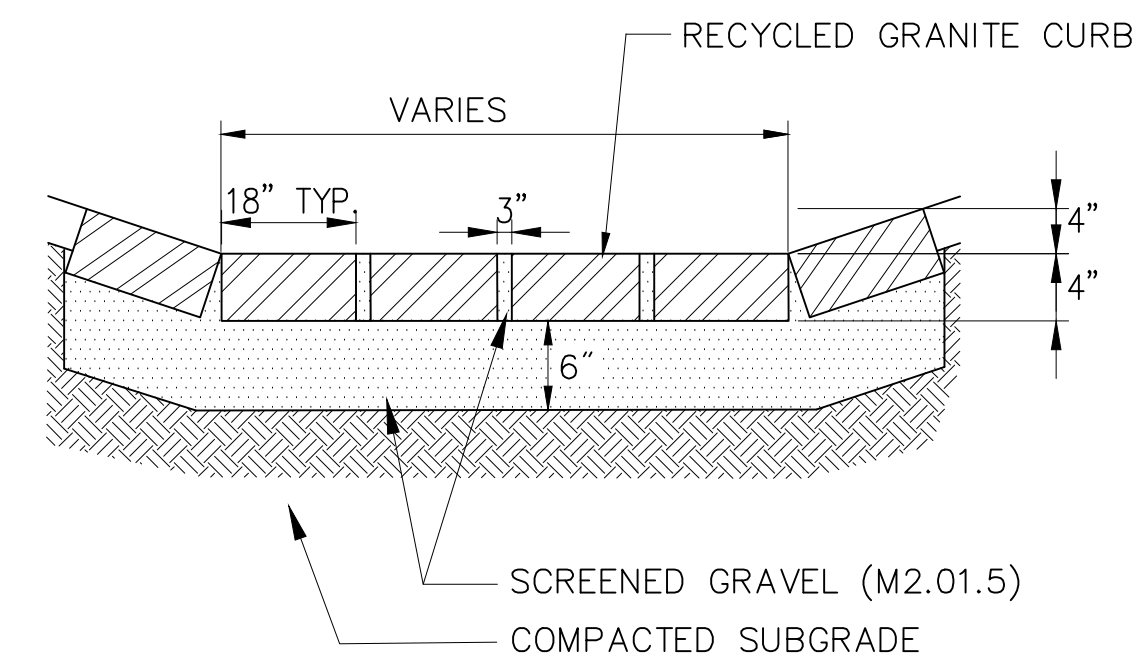
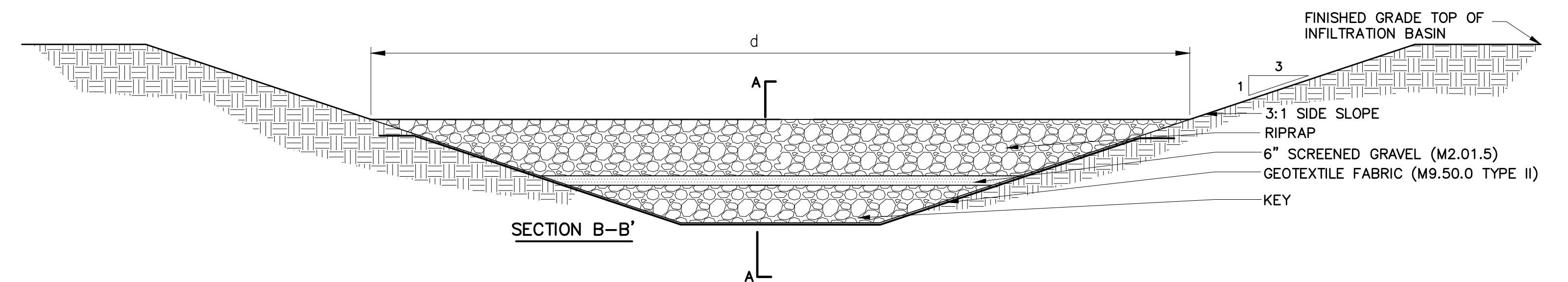


Diagram illustrating the cross-section (SECTION A-A') of a structure, likely a stormwater management facility, showing various layers and components:

- FINISHED GRADE
- STONE APRON UNDER FLARED END SECTION
- SEE PLANS FOR DIA. AND INVERT ELEV.
- FLARED END SECTION
- FINISHED GRADE
- RCP
- SCREENED GRAVEL (M2.01.5)
- COMPACTED SUBGRADE
- FLARED END SECTION
- FILTER FABRIC

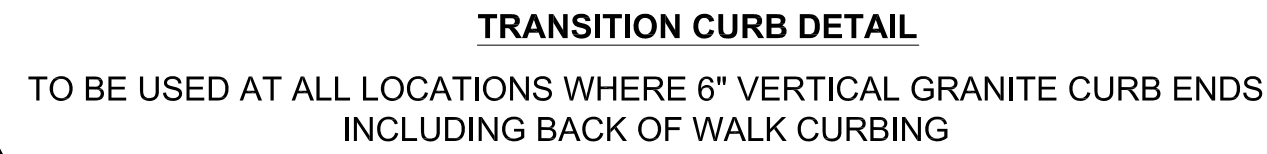
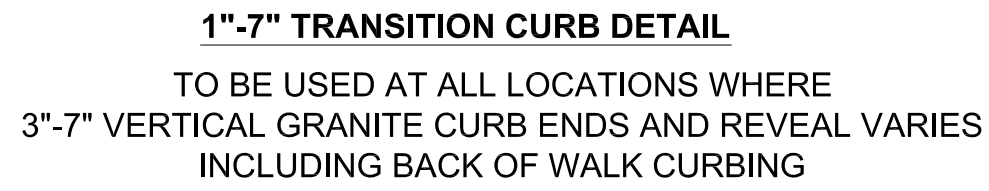
Dimensions and Slopes:

- 18" (Total height of the structure)
- 8" (Height of the RCP section)
- 12° MIN (Slope of the flared end section)
- 18" MIN (Width of the flared end section)



Sediment	Check Dam (centerlines)	a (Elev. ft)	b (Elev. ft)	c (Elev. ft)	d (Length, ft)
Forebay	168+99.8	50	51	50	8'
173+65	173+65 R: 61.39'	50	51	50	9'
175+00	175+00 R: 78.42'	46	47	46	13'
312+60	312+62 R: 139.35'	25	26	25	37'
335+30	335+37.48 R: 46.52'	37	38	37	9'

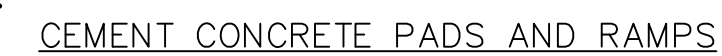




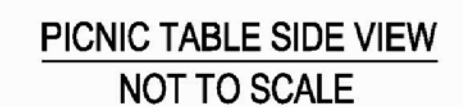
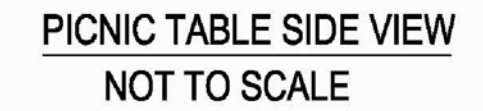
ENGRAVED TEXT SHALL BE 6" HIGH,  
MS EAVES FONT PAINTED BLACK  
OR APPROVED EQUIVALENT




- NOTES:  
1. COMPASS POINTS SHALL BE SURVEYED AND STAKED IN THE FIELD FOR APPROVAL BY ENGINEER..  
2. COMPASS POINTS SHALL BE ORIENTED TO TRUE NORTH..



- NOTES:
1. SURFACE SHALL BE BROOM FINISHED PERPENDICULAR TO DIRECTION OF TRAVEL AND SHALL BE SLOPED FOR POSITIVE DRAINAGE.
  2. EXPANSION JOINTS SHALL NOT EXCEED 30' O.C. AND SHALL BE PLACED AT ALL WALKWAY ABUTMENTS. CONTROL JOINTS SHALL NOT EXCEED 36 S.F.
  3. CEMENT CONCRETE SHALL BE AIR ENTRAINED CLASS D, 4,000 PSI, 3/4", 610



	DETAIL REVISION	6/23/2015
NO.	REVISION DESCRIPTION	DATE
REVISIONS		